ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Tank Programs Division
Underground Storage Tank (UST) Program

DOCUMENT SUBMITTAL FORM

[use as COVER SHEET when submitting the documents listed below]

ADEQ use only

UST FACILITY INFORMATION:

Honeywell Engines Product Center
Facility Name

0-002227
Facility ID

111 South 34th Street
Street Address

0393.02 - .10, .15-.20
LUST Number(s)

Phoenix
City

85034
Zip Code

Maricopa
County

PERSON RESPONSIBLE FOR SUBMITTING DOCUMENT:

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Name

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Telephone (daytime)

PERSON CATEGORY	ADEQ ID #
X UST owner	4875
☐ UST operator	
☐ UST volunteer	
☐ Property owner	

LUST, RELEASE OR CORRECTIVE ACTION DOCUMENT: (check all that apply; * indicates document requires signed certification statement)

- ☐* 14 day report (suspected release)
- ☐* 90 day report (suspected release)
- ☐* 14 day report (confirmed release)
- ☐* 90 day report (confirmed release)
- ☐* LUST site classification form
- ☐* Site characterization report (SCR)
- ☐* Free Product Report
- ☐* Tier 2 risk evaluation
- ☐* Tier 3 risk evaluation
- ☐* Corrective action plan (CAP)
- X * Periodic site status report (includes groundwater monitoring reports)
- ☐* LUST case closure request w/corrective action completion report
- ☐* Addendum (check related document type)
- ☐ Other: (please specify)

UST DOCUMENT: X

SAF DOCUMENT: ☐ Application #: _____

INFORMAL APPEAL:
- ☐ LUST
- ☐ SAF
- ☐ UST

CERTIFICATION STATEMENT OF UST OWNER, OPERATOR OR VOLUNTEER: (for only documents designated above by *)

"I hereby certify, under penalty of law, which this submittal and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

Signature of UST owner, operator or volunteer

11/25/09
Date

Troy J. Kennedy
Name of UST owner, operator or volunteer (printed)

Remediation Portfolio Director
Title

Revised 8/05

Honeywell

Health, Safety, Environment and Remediation
101 Columbia Turnpike Solvay-4
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November 25, 2009

By FedEx

Mark W. Lucas
Case Manager – LUST Enforcement Unit
TPD/Corrective Action Section
Arizona Department of Environmental Quality
1110 W. Washington Street, #4415A-3
Phoenix, AZ 85007

Re: *Third Quarter 2009 Remediation Status Report*
LUST File #0393.02-.10, .15-.20
Facility ID #0-002227

Dear Mr. Lucas:

Honeywell is submitting this Third Quarter 2009 Remediation Status Report in accordance with requirements in the Arizona Department of Environmental Quality's (ADEQ) Corrective Action Plan (CAP) Final Approval letter dated October 7, 2005, and CAP modification approval letters dated December 20, 2005, March 7, 2006, September 28, 2006, March 27, 2007, and February 29, 2008.

If you should have any questions or require discussion, please contact me at 973-455-4279 or Jeff Mieth at 480-295-3935. For your convenience, my e-mail address is troy.j.meyer@honeywell.com and Jeff's is jeffrey.mieth@ch2m.com.

Sincerely,

Troy J. Kennedy
Honeywell - Health, Safety, Environment and Remediation
Remediation Portfolio Director

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Final Report

Third Quarter 2009 Remediation Status Report

Honeywell 34th Street Facility
Phoenix, Arizona
Facility ID No. 0-002227
LUST File Nos. 0393.02-.10, .15-.20

Prepared for

Honeywell International Inc.

November 2009

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Prepared by

CH2MHILL

HONEYWELL SITE #: R37380
DOCUMENT FILE LOC. 4.03.05

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Acronyms and Abbreviations

µg/L	micrograms per liter
ADEQ	Arizona Department of Environmental Quality
bgs	below ground surface
BSVE	biologically-enhanced soil-vapor extraction
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COP	City of Phoenix
DQE	data quality evaluation
Facility	Honeywell 34th Street Facility
Honeywell	Honeywell International Inc.
LEL	lower explosive limit
LUST	leaking understand storage tank
LUST FSP	Leaking Underground Storage Tank Field Sampling Plan
MCAQD	Maricopa County Air Quality Department
MCL	maximum contaminant level
MTBE	methyl tert-butyl ether
OU	Operable Unit
PSHIA	Phoenix Sky Harbor International Airport
scfm	standard cubic feet per minute
TCA	trichloroethane
TCE	trichloroethene
TPH	total petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VAL	vapor action level
VOC	volatile organic compound

1.0 Introduction

1.1 Scope and Purpose

This quarterly periodic status report summarizes the ongoing underground storage tank (UST) remediation and monitoring activities conducted during Third Quarter 2009 for Leaking Underground Storage Tank (LUST) File Nos. 0393.02-.10, .15-.20, Facility ID No. 0-002227 at the Honeywell International Inc. (Honeywell) Aerospace 34th Street Engines Product Center (Facility or Honeywell facility).

This report is being submitted pursuant to reporting requirements in the Arizona Department of Environmental Quality (ADEQ) letter, dated October 7, 2005 (ADEQ, 2005a), issuing final approval of Honeywell's Corrective Action Plan (CAP) (CH2M HILL, 2004a-b), and in accordance with ADEQ's CAP modification approval letters, dated December 20, 2005 (ADEQ, 2005b); March 7, 2006 (ADEQ, 2006a); September 28, 2006 (ADEQ, 2006b); March 27, 2007 (ADEQ, 2007); and February 29, 2008 (ADEQ, 2008a). Beginning with the Second Quarter 2009 Remediation Status Report (August 2009), the periodic status reports now include a summary of the operations and related soil-vapor sampling data for the biologically-enhanced soil-vapor extraction (BSVE) system that began initial soil-vapor extraction operations on May 27, 2009. The BSVE system is currently in the initial system ramp-up period which will continue until adequate methane has been extracted and the injection program can be safely initiated.

1.2 Background

The Honeywell facility has been used as a manufacturing and testing facility for the production of aircraft engines and auxiliary equipment since 1951. Figure 1-1 illustrates the Facility location and layout. (All figures are provided at the end of this report.)

In 1999, free-phase petroleum hydrocarbons (free product) were detected at the Honeywell facility, and an investigation was initiated under ADEQ's UST Corrective Action Section. Since that time, Honeywell has investigated the extent of contamination, initiated corrective actions to recover free product, developed a CAP, and commenced initial operations of the approved remedial alternative. The ADEQ-approved CAP (CH2M HILL, 2004a-b) recommends the following remedial actions for the free product and vadose zone:

- Remediate soil contamination in the vadose zone, the petroleum hydrocarbon smear zone, and the free-product pool using BSVE.
- Supplement BSVE remediation by selectively removing free product from existing groundwater monitoring wells using a combination of manual and automatic (where necessary) liquid pumping.

The Honeywell facility is located within Operable Unit (OU) 2 of the Motorola 52nd Street Superfund Site at 111 South 34th Street in Phoenix, Arizona. Per ADEQ's October 7, 2005 CAP Final Approval letter (ADEQ, 2005a), following completion of free-product removal to

the maximum extent practicable, the most appropriate remediation method for dissolved-phase groundwater contamination associated with Honeywell's UST program will be revisited with ADEQ to ensure coordination with the remedy selected for the regional chlorinated volatile organic compound (VOC) plume being evaluated by ADEQ's Federal Projects Unit and the USEPA. The selected alternative presented in the CAP includes monitored natural attenuation to address any remaining dissolved-phase groundwater contamination after aggressive source removal is complete.

Figure 1-2 presents Honeywell's network of BSVE system soil-vapor extraction and monitoring wells. Figure 1-3 presents Honeywell's UST groundwater monitoring well network. Design and construction of the BSVE system at the Honeywell facility included incorporating 11 existing groundwater monitoring wells as part of the BSVE extraction/injection well network. As shown in Figure 1-3, the monitoring wells that are hard-piped into the system and are being used for the extraction of soil vapor and, in the future, injection of air include monitoring wells ASE-20A, ASE-39A, ASE-41A, ASE-46A, ASE-51A, ASE-53A, ASE-56A, ASE-57A, ASE-59A, ASE-66A, and PL-101A. These wells are no longer included in the UST quarterly groundwater monitoring program.

Initial ramp-up of the BSVE system is addressing soil-vapor (primarily methane) impacts on the Honeywell-owned property north of Air Lane (Phase A) and Honeywell-operated property leased from the City of Phoenix (COP) south of Air Lane (Phase B). Soil-vapor extraction wells have been brought online sequentially during the initial system ramp-up period commencing on May 27, 2009 and will continue until all 36 wells have been operated in extraction mode. Full operation of the system is considered to be when all wells in Phases A and B have actively extracted, equipment performance has been assessed, and injection of air has occurred throughout the well network consistent with the Design Basis Report (CH2M HILL, 2007a).

Construction associated with the expansion of the BSVE system onto the northern portion of Phoenix Sky Harbor International Airport (PSHIA) property, north of Runway 8-26 (Phase C), will begin in Fourth Quarter 2009 with installation of the process and process monitoring wells. Trenching, piping, and manifolding the new wells to the treatment pad will follow in 2010. Remedial measures in the area south of Runway 8-26 (Phase D) are being evaluated in coordination with the COP. Figure 1-2 illustrates the location of BSVE Phases A through D.

1.3 Summary of Activities

This quarterly periodic status report summarizes the activities conducted or completed as part of the UST corrective action from July 1, 2009 through September 30, 2009 (Third Quarter 2009).

1.3.1 Biologically-enhanced Soil-vapor Extraction Remediation

Initial system ramp-up and operation of the BSVE treatment equipment in Phases A and B commenced on May 27, 2009. As of the end of Third Quarter 2009 (September 30, 2009), 23 of the 36 injection/extraction wells were being operated in extraction mode at a total soil-vapor extraction rate of approximately 860 standard cubic feet per minute (scfm), measured at the end of the quarter. This extraction rate is lower than initially expected due to the

elevated water table and the partially submerged well screens in some areas of the system. The wells being operated in extraction mode as of the end of the Third Quarter 2009 were BV-9N, BV-13N, BV-10N, BV-1N, BV-19N, ASE-46A, BV-20N, BV-4N, BV-22N, BV-18N, BV-2N, ASE-41A, BV-11N, BV-15N, BV-24N, BV-25N, BV-16N, BV-3N, ASE-56A, BV-23N, ASE-20A, PL-101A, and ASE-39A. Initial extraction from wells involves elevated levels of methane; these levels are reduced shortly after wells are brought online. The combustible concentration in the inlet manifold of the thermal oxidizer (combined soil vapor from the extraction wells and make-up air) must be maintained below 30 percent of the lower explosive limit (LEL) according to the manufacturer's recommended operating conditions. Using field sampling and inlet monitoring data at the thermal oxidizer, the remaining wells will be brought online until all wells are operating in extraction mode.

Field parameters for each of the wells brought online during Third Quarter 2009 were collected prior to those individual wells being brought online. This monitoring was conducted to confirm there were no significant changes from the baseline monitoring events conducted in June-July and September-November 2008. Field parameters from active injection/extraction wells are currently collected at least monthly.

1.3.2 Vadose Zone Monitoring

The quarterly soil-vapor sampling event was conducted from September 2, 2009 through September 15, 2009. The next sampling event is scheduled for November 2, 2009 through November 20, 2009.

1.3.3 Free-product Monitoring/Recovery

Three monthly free-product measurement/recovery rounds and four additional rounds of manual free-product-specific monitoring/recovery were conducted. A summary of the total gallons of free product recovered during the reporting period and the total gallons of free product recovered since Honeywell began free-product recovery operations is provided in Section 2.2.

1.3.4 Groundwater Monitoring

The quarterly UST groundwater sampling event was conducted from September 8, 2009 through September 18 2009. Three monthly water-level measurement events were conducted during the quarter on July 1, 2009, August 4, 2009, and September 3, 2009. The next quarterly UST groundwater sampling event is scheduled for December 2009.

1.3.5 Deliverables

An updated list of deliverables submitted through Third Quarter 2009 since the Site Characterization Report, dated August 23, 2002, was submitted to ADEQ is included as Appendix A.

2.0 Site Remediation Activities

This section summarizes the scope and results of remediation activities associated with Honeywell's CAP (CH2M HILL, 2004a-b) that were conducted during Third Quarter 2009. The activities include vadose zone and smear zone remediation using the BSVE system supplemented with direct liquid free-product recovery from non-BSVE system wells where applicable.

2.1 Vadose Zone Remediation

Remediation of the soil contamination in the vadose zone and the petroleum hydrocarbon smear zone and vapor-phase recovery of the free-product pool occur through the extraction of the soil vapor and aeration of the vadose zone. Details on the system status and performance are provided in the following sections.

2.1.1 Biologically-enhanced Soil-vapor Extraction System

Initial BSVE system ramp-up in Phases A and B commenced on May, 27 2009. Details of the system status and performance, including a summary of mass removal, are provided below.

BSVE System Status and Performance, Third Quarter 2009:	
Number of wells in extraction mode (at close of quarter):	23
Number of wells in injection mode (at close of quarter):	0
Number of wells brought online this quarter:	15
Number of wells remaining to be brought online:	13
Anticipated full startup date based on progress:	First Quarter 2010 (includes full-scale extraction in Phases A and B and air injection throughout the well network consistent with the objectives in the Design Basis Report)
Total system operating time for the quarter:	1,272 hours[1]
Average total extraction rate for the quarter:	681 cubic feet per minute
Average total injection rate for the quarter:	0 cubic feet per minute
Total mass removed for the quarter (volatilization – BTU calculation[2]):	212,156 lbs
Total mass removed for the quarter (biodegradation[3]):	136,699 lbs
Total mass removed for the quarter (volatilization & biodegradation):	348,855 lbs
Total mass removed through the end of the quarter (volatilization & biodegradation):	419,344 lbs

[1] The BSVE system is currently in the initial ramp-up phase, and the scheduled and unscheduled maintenance is higher than expected during normal operations.

[2] Total mass removed via volatilization was estimated based on BTU consumption as measured at the Thermal Oxidation unit following the equation presented in "*Soil Vapor Field Parameter Collection and Interpretation Technical Memorandum*" attached as Appendix C.

BSVE System Status and Performance, Third Quarter 2009:	
Average daily mass removal rate for the quarter:	3,792 lbs/day
Average daily mass removal since BSVE operations commenced:	3,328 lbs/day

Cumulative mass removal via biodegradation is presented in Figure 2-1 and cumulative mass removal via volatilization (using BTU consumption as described in Appendix C) is presented in Figure 2-2. These graphs show the total mass of hydrocarbons removed since initial BSVE system ramp-up commenced on May 27, 2009. It should be noted that during the ramp-up period, the biodegradation estimate includes some biodegradation that occurred earlier (pre-extraction); it is only after the soil gas is well purged from the subsurface that these estimates will be representative of ongoing biodegradation rates. Additional details are provided in Section 3.2.

A summary of planned or unscheduled system shutdowns occurring during the quarter is provided below.

Summary of BSVE System Shutdowns, Third Quarter 2009[4]:

Date	Duration	Planned or Unscheduled	Reason or Cause
07/03/09	4 hours	Unscheduled	High inlet pressure to thermal oxidizer
07/04/09	6 hours	Unscheduled	Low inlet pressure to thermal oxidizer
07/05/09	242 hours	Unscheduled	Cooling tower water level[a]
07/16/09	62 hours, 45 minutes	Unscheduled	Low quench flow
07/19/09	22 hours	Unscheduled	Low quench flow
07/20/09	15 hours	Unscheduled	Booster blower alarm shutdown
07/21/09	53 hours	Unscheduled	Low flow through scrubber
07/24/09	24 hours	Unscheduled	Low inlet pressure to thermal oxidizer and low low level in cooling tower
07/26/09	18 hours, 15 minutes	Unscheduled	High-high lift station level alarm
07/27/09	17 hours	Planned	Scheduled vendor maintenance
07/28/09	12 hours	Unscheduled	Critical shutdown during vendor program download
07/28/09	59 hours	Planned	Scheduled vendor maintenance
08/01/09	8 hours, 45 minutes	Unscheduled	High-high level in lift station
08/07/09	90 minutes	Unscheduled	High-high level in lift station

[3] Total mass removed via biodegradation was estimated based on oxygen concentrations following the equation presented in *Operations and Maintenance Plan for the Biologically-enhanced Soil Vapor Extraction System* (CH2M HILL, 2009a).

[4] During the initial ramp-up period, unscheduled shut-downs are anticipated to occur more frequently than when the BSVE system is in full operation.

Summary of BSVE System Shutdowns, Third Quarter 2009[4]:

Date	Duration	Planned or Unscheduled	Reason or Cause
08/14/09	3 hours	Unscheduled	Repair float switches in lift station
08/16/09	1 hour	Unscheduled	High-high level in lift station
08/17/09	45 minutes	Unscheduled	High-high level in lift station
08/17/09	61 hours, 45 minutes	Unscheduled	High-high level in lift station
08/21/09	27 hours	Unscheduled	Differential pressure in scrubber
08/23/09	10 hours, 15 minutes	Unscheduled	Low pressure at thermal oxidizer and scrubber low quench flow
08/24/09	108 hours, 45 minutes	Unscheduled	Low pressure at thermal oxidizer and differential pressure between quench chamber/scrubber
08/29/09	114 hours	Unscheduled	Oxidizer/scrubber failure alarm and vendor maintenance
09/17/09	9 minutes	Unscheduled	Low pH at lift station
09/17/09	61 hours	Planned	Scheduled annual maintenance

Notes: [a] During this shutdown, a leak was discovered in the flanged connection to the quench tube and was repaired, which prolonged the duration of the unscheduled shutdown. Planned maintenance tasks were completed on July 6 through 8, 2009 during this shutdown period.

Additional items of interest include:

- During the scheduled maintenance performed by the vendors (Maple Leaf Environmental Equipment and Catalytic Combustion Corporation) from July 27 through July 30, 2009, adjustments were made to the thermal oxidizer and quench/scrubber system. These adjustments included replacement of the gas regulator on the thermal oxidizer gas train to allow better gas pressure flow regulation to the burner, and removal of the purge air valve and integration of the thermal oxidizer purge air into the extraction blower programming loop. In addition, the vendors installed bypass loops on the quench/scrubber water recirculation pipes that improved the BSVE system performance from approximately 300 scfm to 750 scfm (nine extraction/injection wells online at the time).
- The Maricopa County Air Quality Department (MCAQD) conducted an unannounced dust inspection of the Honeywell BSVE Project on July 10, 2009. There were no compliance findings or Notices of Violation that resulted from the dust inspection. Approximately 2 weeks after the MCAQD dust inspection, all asphalt repairs to the areas disturbed during construction of the BSVE system were completed, and the Dust Permit Cancellation Request was submitted to MCAQD on July 29, 2009.
- On August 28, 2009 and August 31, 2009, the COP Development Services Department conducted the structural and electrical inspections, respectively, for the BSVE operator's trailer. The certificate of acceptance permit for the trailer was issued on August 31, 2009 following the electrical inspection.

- Air injection is anticipated to begin during Fourth Quarter 2009. Following confirmation that methane levels in all shallow wells are at acceptable levels and adequate concentrations of methane have been extracted from the deep wells, air will initially be injected into process well BV-2N, specifically to shake down the injection system and monitoring procedures. Once this initial injection shakedown has concluded successfully, additional wells will be switched over from extraction to injection. These wells will be monitored in pre-determined phases that have been established to enhance the flow of atmospheric oxygen into the deeper parts of the vadose zone and to accelerate the soil-gas movement and vapor recovery in the soil closest to the water table. The intent of the program is to ensure oxygen levels at 5 percent throughout the deep soil zones. Air injection throughout the Phase A and Phase B well network is expected to be fully implemented during First Quarter 2010. Only a certain number of wells in Phase A and Phase B will be operating in injection mode at any one time and extraction and injection will be rotated among wells to optimize air flow and oxygenation in the deep soil zones above the water table. Air injection rates will not exceed 50 percent of the vapor extraction rates and extraction will continue in perimeter wells to confirm vapor migration control. In the future when shallow and deep vapor concentrations have been reduced, injection in perimeter wells may also be conducted.
- The 60- and 90-percent design packages for BSVE Phase C were submitted to the COP and their Construction Manager at-risk, Kiewit, on July 14 and September 23, 2009. Design review meetings were subsequently held on July 21 and September 30, 2009. Kiewit issued a preliminary cost estimate based on the 60-percent Phase C design, and this estimate was reviewed during a meeting at PSHIA on August 21, 2009. Kiewit and CH2M HILL worked collaboratively to address specific action items from this meeting.
- Upon receipt of comments from the COP and Kiewit on the BSVE Phase C 90-percent design package, CH2M HILL will initiate preparation of a 100-percent design package. This package will be submitted to the COP, Kiewit, and Honeywell in late Fourth Quarter 2009.
- The BSVE Phase C wells will be installed prior to installation of the piping network. A preliminary tenant improvement package for the proposed BSVE Phase C wells was submitted on April 3, 2009 to the COP Aviation Department. The final tenant improvement package for the BSVE Phase C wells was submitted on August 5, 2009. The preconstruction planning meeting was held on October 8, 2009. Well installation will commence in Fourth Quarter 2009.
- On July 17, 2009, Honeywell issued a technical memorandum to the COP summarizing non-Honeywell releases at PSHIA in the vicinity of the Phase D area (south of Runway 8-26). This technical memorandum was based on a review of documents provided to Honeywell by the COP. The information presented in this technical memorandum was developed to ensure consideration of these releases as part of the Phase D alternatives evaluation.
- On August 28, 2009, Honeywell met with representatives from PSHIA Airside Operations and the Aviation Department's Design and Construction Services group to gain operational input and better understand potential limitations associated with the remedial alternatives currently under consideration. On September 17, 2009, Honeywell

provided the COP with a proposed alternatives ranking matrix for Phase D. This matrix included ratings for effectiveness, implementability, cost, and sustainability considerations. Honeywell will incorporate the COP's input on the proposed evaluation criteria and rankings in the Detailed Alternatives Evaluation Report.

- Honeywell provided progress updates to the COP in meetings at PSHIA on July 21, 2009 and September 18, 2009.

2.1.2 Proposed Updates to the Biologically-enhanced Soil-vapor Extraction Operations and Maintenance Plan

Proposed updates to the *Operations and Maintenance Plan for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street System, Phoenix, Arizona* (BSVE O&M Plan) (CH2M HILL, 2009a) and the *Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment, Honeywell 34th Street System, Phoenix, Arizona* (CH2M HILL, 2008a) are presented here as a result of requirements set forth in the Air Permit, in response to ADEQ and other stakeholder comments during the initial ramp-up period.

On July 15, 2009, CH2M HILL submitted on Honeywell's behalf, a revised *Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment* to MCAQD. This revised version included minor text and table changes on Alternate Operating Scenario 1 to reflect final construction and operation of the BSVE air pollution control equipment. On July 17, 2009, CH2M HILL provided on Honeywell's behalf, an e-mail to MCAQD summarizing various changes to the *Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment*. These changes included the initial soil-vapor extraction date, correction for the soil-vapor extraction blower air flow in Table 2-1, changes to the text pertaining to refinement of maintenance tasks and frequencies, additional detail on the method/instrumentation for soil-vapor extraction wells, information on BSVE inlet sampling in Table 2-2, additional detail for Alternate Operating Scenario 1, and an update of the maintenance log sheets. MCAQD approved the changes in a letter to Honeywell dated July 27, 2009.

Another revision to the *Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment* will be submitted to MCAQD during Fourth Quarter 2009 for review and approval. The revision will include the option to automate the recording of the scrubber water level and monitoring of the inlet and outlet VOC concentrations of each vapor granular-activated carbon unit, clarification of language regarding requirements for logging of operational parameters, the addition of information to the daily log sheet to more clearly indicate when the system is treating soil vapor, and updates to the periodic maintenance sheets to reflect changes in maintenance schedules based on system runtime.

A review of ADEQ's June 18, 2009 comment letter to Honeywell on the BSVE O&M Plan (CH2M HILL, 2009a) has been conducted and certain electrical, instrumentation, and control changes are being incorporated in the BSVE O&M update following the initial shakedown of the system (December 2009). Honeywell provided a response to ADEQ's comment letter on October 16, 2009.

A revision to the BSVE O&M Plan will be completed during Fourth Quarter 2009 as a result of shakedown activities. No changes to operation, maintenance, or monitoring will be made

in sections of the Plan requiring MCAQD or ADEQ approval prior to implementation until such approval is received. The revision will include updates to reflect the current operating conditions, including updating the equipment and control descriptions, electrical, control and instrumentation section to reflect current system conditions, revisions to standard operating procedures, and changes to equipment maintenance frequencies.

2.1.3 Biologically-enhanced Soil-vapor Extraction Permit Compliance

This section summarizes the compliance activities related to the air and wastewater permits obtained for operation of the BSVE system. The BSVE system operates under the Facility's Title V Permit (#V97008) issued on December 27, 2007 and the Facility's Class A Wastewater Discharge Permit (#0812-1510) issued on December 5, 2008.

Compliance activities during Third Quarter 2009 included:

- Twelve-month rolling and monthly emission estimates for August 2009 and September 2009 were prepared for the BSVE emission sources and were included in the monthly reports maintained in the Facility's air permit files. As required by Sections 21 and 34.G of the air permit, the information contained in the monthly reports will be incorporated into the semiannual monitoring report covering the reporting period from July 27, 2009 to January 26, 2010. The semiannual monitoring report is due to MCAQD by February 28, 2010. The July 2009 12-month rolling and monthly emission estimates and other required monthly data were submitted to Honeywell and were included in the semiannual monitoring report submitted by Honeywell to MCAQD on August 27, 2009.
- The Facility submitted a semiannual monitoring report to MCAQD on August 27, 2009 for the reporting period from January 27, 2009 to July 26, 2009. This report included the BSVE emissions estimates, summary of operating parameters, analytical data collected from the system during the reporting period, and copies of supporting documentation.
- On August 20, 2009, MCAQD approved each of the four BSVE system performance test protocols that were submitted on July 21, 2009: determination of VOC emissions from the catalytic combustion thermal oxidizer, determination of VOC emissions from the BSVE system, determination of acid gas emissions from the BSVE system, and determination of dioxin/furan emissions from the BSVE system.
- The BSVE performance test was conducted from September 28, 2009 through September 30, 2009 in accordance with the test plans approved by MCAQD. A Performance Test Report providing the results of the four performance tests was submitted to MCAQD and ADEQ on October 30, 2009 in accordance with Section 34.E.10 of the Permit.
- On August 4, 2009, MCAQD issued Notice of Violation #800301 to the Facility in response to the deviation report submitted to MCAQD on July 29, 2009. The deviations noted in the report were (1) failure to collect samples at the outlet of the first vapor granular-activated carbon unit in accordance with Permit Condition 34.F.4.b.iii and (2) failure to collect samples at the outlet of the first potassium permanganate adsorption unit for vinyl chloride in accordance with Permit Condition 34.F.5.b.i. during the week of July 13, 2009. There were no excess emissions as a result of these missed samples. A written response describing the corrective actions that had been and would be

implemented to address the root cause of the missed samples was submitted to MCAQD on August 17, 2009.

- On August 28, 2009, MCAQD issued Notice of Violation #800603 to the Facility in response to the deviation report dated August 20, 2009 for: (1) failure to maintain daily operational logs as required by Section 34.D.2 of the Permit, (2) failure to record the water level in the caustic scrubber at least once per day in accordance with Section 34.F.3.b.ii of the Permit, and (3) failure to measure the inlet and outlet VOC concentrations of each vapor granular-activated carbon unit as propane, in accordance with Section 34.F.4.B.i of the Permit, on several days from June 20, 2009 through July 26, 2009, during which time, the BSVE system operated intermittently. There were no excess emissions as a result of these deviations. A written response describing the corrective actions that had been and would be implemented to address the root cause of the recordkeeping deviations was submitted to MCAQD on September 11, 2009.
- In accordance with Section C of the Wastewater Discharge Permit, the July 2009, August 2009, and September 2009 Monthly Compliance Monitoring Reports were submitted to the COP on August 26, 2009, September 17, 2009, and October 27, 2009, respectively. These reports included the nature and concentration of the pollutants, the measured maximum and average daily flows, and the results of all samples collected during the calendar month for the BSVE Compliance Sampling Point 1510.12.

2.2 Free-product Recovery

Free product continues to be recovered biweekly from non-BSVE system groundwater monitoring wells containing free-product thicknesses greater than 0.1 foot, per Section 2.3 of the ADEQ-approved *Groundwater Sampling and Free-product Monitoring and Recovery Plan* (LUST FSP) (CH2M HILL, 2008b). No automated skimmers are currently required in any well pursuant to the requirements of the CAP (free-product thicknesses in monitoring wells greater than 0.75 foot). As stipulated in the CAP and LUST FSP, and pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (the initial occurrence of a metric exceedance in a monitoring well located on PSHIA property), Honeywell will continue biweekly manual free-product recovery (subject to PSHIA operations' site access approval) in any well that exceeds the 0.75 foot metric because installation of recovery equipment would cause disruption to PSHIA operations. Only one monitoring well (ASE-107A) located on PSHIA property has historically contained free-product thicknesses exceeding the 0.75 foot metric. The LUST FSP is also included as Volume 4 of the BSVE O&M Plan (CH2M HILL, 2009a). A summary of free-product recovery during the quarter is provided below.

Summary of Free-product Recovery, Third Quarter 2009:	
Number of wells containing an automated skimmer system:	0
Number of wells included in biweekly manual recovery:	2 (July), 1 (August), 1 (September)
Well from which greatest amount recovered during the quarter:	ASE-107A (3.3 gallons)
Total volume of free product recovered this quarter:	3.4 gallons
Total volume of free product recovered to-date (since June 1, 1999):	7,283 gallons

Table 2-1 provides details on the amount of free product recovered at each monitoring well that historically has had measurable free product.

As of the end of Third Quarter 2009, free product will continue to be recovered biweekly using a portable free-product pump from monitoring well ASE-107A and monitoring well ASE-67A, which both contained greater than 0.1 foot of free product during and at the end of Third Quarter 2009.

3.0 Monitoring Activities

This section describes soil-vapor, groundwater, and free-product monitoring data collected as part of Honeywell's ongoing UST monitoring program. Because there were no additional monitoring wells installed or associated soil samples collected during the reporting period (July 1, 2009 to September 30, 2009), this section does not include a discussion of soil data.

3.1 Work Conducted

Soil-vapor monitoring conducted during Third Quarter 2009 included:

- Twenty soil-vapor samples (does not include field duplicates) collected from process monitoring wells (not extraction/injection wells) in accordance with the BSVE O&M Plan (CH2M HILL, 2009a) and analyzed for VOCs by USEPA Method TO-15.
- Collection of soil-vapor samples from the PSHIA and Honeywell groundwater monitoring wells and the PSHIA and Honeywell subsurface utility vaults, identified in the BSVE O&M Plan (CH2M HILL, 2009a) as part of the quarterly BSVE O&M soil-vapor monitoring event. These samples were analyzed for VOCs by USEPA Method TO-15.
- Field parameter measurements (methane, percent-LEL, oxygen, carbon dioxide, and flame ionization detector readings) obtained at 64 process monitoring locations (i.e., process monitoring wells, extraction/injection wells, and total extracted gas) in accordance with the BSVE O&M Plan (CH2M HILL, 2009a). Percent relative humidity and temperature field measurements were also obtained at the process monitoring wells.
- Field parameter measurements (methane, percent-LEL, oxygen, carbon dioxide, and flame ionization detector readings) obtained at 146 non-process soil-vapor monitoring locations (i.e., vaults, manholes, sentinel wells, and sub-slabs) in accordance with the BSVE O&M Plan (CH2M HILL, 2009a).
- Seventeen soil-vapor samples (includes two field duplicates) collected to verify the accuracy of the field measurements in accordance with the BSVE O&M Plan (CH2M HILL, 2009a). Ten process monitoring locations (BSVE inlet, extraction/injection wells, and process monitoring wells) were analyzed for total petroleum hydrocarbons (TPH) and methane by USEPA Method TO-3M, and oxygen and carbon dioxide by Method ASTM 1946. Five non-process monitoring locations (sentinel wells and a sub-slab well) were analyzed for methane by USEPA Method TO-3M.
- The quarterly field measurement monitoring event for oxygen, carbon dioxide, methane, and percent-LEL at the PSHIA monitoring wells and subsurface utility vaults occurred from September 2, 2009 through September 3, 2009 as part of the PSHIA vault monitoring program and in accordance with the BSVE O&M Plan (CH2M HILL, 2009a)

Free-product thickness monitoring conducted during Third Quarter 2009 included:

- Monthly measurements from 56 monitoring wells, as well as biweekly measurements from two wells in July 2009 and one well in both August and September 2009, in accordance with the LUST FSP (CH2M HILL, 2008b). The monthly rounds were conducted on July 1, August 4, and September 3, 2009.

Groundwater monitoring conducted during Third Quarter 2009 included:

- Monthly groundwater elevation measurements (CH2M HILL, 2008b) on July 1, August 4, and September 3, 2009, in accordance with the LUST FSP.
- One hundred and thirty-one groundwater samples collected between September 8, and September 18, 2009. The Third Quarter 2009 UST water quality sampling round coincides with the sitewide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) annual groundwater sampling event. Forty-three of these monitoring wells were sampled as part of the quarterly UST monitoring program in accordance with the LUST FSP (CH2M HILL, 2008b). These samples were analyzed for VOCs by USEPA Method SW8260B and TPH by USEPA Method SW8015. A groundwater sample collected from CERCLA monitoring well ASE-84A was included in the analytical data evaluation to support the delineation of the methyl tert-butyl ether (MTBE) plume.
- As discussed in Section 1.2 and shown in Figure 1-3, 11 groundwater monitoring wells previously included in the UST monitoring well network are now connected to the BSVE system and are no longer included in the monthly groundwater elevation measurements and quarterly groundwater quality sampling event.

3.2 Vadose Zone Monitoring

Vadose zone monitoring during Third Quarter 2009 included the collection of soil-vapor samples for VOC analysis by USEPA Method TO-15 and field parameter measurements as listed above. Table 3-1 presents a summary of the detected analytes for the soil-vapor samples collected from the shallow monitoring points, along with a comparison of the analytical results to the applicable Tier 1 and Tier 2 vapor action levels (VALs). VALs were developed as part of the focused human health risk assessment for the Facility using standard USEPA methods and assumptions, as presented in Section 8.6.2 of the BSVE O&M Plan (CH2M HILL, 2009a). No VALs were exceeded in shallow vapor monitoring wells. A summary of the detected analytes for all soil-vapor samples collected from locations within the BSVE system soil-vapor monitoring network is presented in Table 3-2.

The soil-vapor analytical reports and data quality evaluation (DQE) are provided in Appendix B. A summary of the field parameter measurement activities at process and non-process monitoring wells is presented in Table 3-3. Table 3-4 presents the soil-vapor confirmation sampling comparing the field monitoring results using the RKI Eagle™ portable gas detector with laboratory analytical results, as described in Table 8-1 and Table 8-2 of the BSVE O&M Plan (CH2M HILL, 2009a) at selected process and non-process locations. A summary of the process and non-process soil-vapor monitoring results is provided below.

Summary of Process and Non-process Vapor Monitoring, Third Quarter 2009:	
Total number of process monitoring well samples collected for laboratory analysis (does not include field duplicates):	20
Total number of extraction/injection well and total extracted gas samples collected for laboratory analysis (does not include field duplicates):	8, only TO-3M and ASTM 1946 as confirmation samples
Total number of non-process monitoring well (i.e., sentinel well and sub-slab monitoring points) samples collected for laboratory analysis (does not include field duplicates):	60
Number of shallow (<15 feet below ground surface) monitoring points with VAL exceedances:	0
Total number of vaults or manholes sampled for laboratory analysis (does not include field duplicates):	0
Number of vaults or manholes with vault air action level exceedances:	0
Number of vaults requiring COP notification (>10% LEL measurement):	0
Number of shallow subsurface locations requiring COP notification (>20% LEL measurement):	0

Additional items of interest include:

- The field parameters that were measured prior to bringing extraction wells BV-22N, BV-18N, BV-2N, ASE-41A, BV-11N, BV-15N, BV-24N, BV-25N, BV-16N, BV-3N, ASE-56A, BV-23N, ASE-20A, PL-101A, and ASE-39A online during Third Quarter 2009 were generally similar to the June-July 2008 and September-November 2008 baseline soil-vapor sampling events.
- Benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) are contaminants of concern for Honeywell's UST program. The maximum BTEX concentrations measured in the soil-vapor monitoring points during Third Quarter 2009 were benzene at 0.44J micrograms per liter (µg/L) at groundwater monitoring well PL-2102, toluene at 0.35 µg/L at groundwater monitoring well ASE-54A, ethylbenzene at 16J µg/L at soil-vapor monitoring well P-30-M, and total xylenes at 2.9 µg/L at groundwater monitoring well ASE-54A. These maximum concentrations occurred in samples collected from sentinel wells (at a total depth of approximately 85 feet below ground surface [bgs]). Maximum BTEX levels in similar areas at shallow intervals (<15 feet bgs) were benzene at 0.061 µg/L at process monitoring well PMW-7-U, toluene at <0.025 µg/L at sentinel monitoring well SMW-4-U, ethylbenzene at 0.067 µg/L at sentinel monitoring well SMW-4-U, and total xylenes at 0.088 µg/L at sentinel monitoring well SMW-4-U. BTEX concentrations at extraction/injection wells were not analyzed during Third Quarter 2009, as the annual VOC analysis required by the BSVE O&M Plan (CH2M HILL, 2009a) was conducted and presented in the Second Quarter 2009 Remediation Status Report (CH2M HILL, 2009b).
- Overall, VOC concentrations observed during Third Quarter 2009 using USEPA Method TO-15 (presented in Table 3-1 and Table 3-2) decreased when compared to Second

Quarter 2009 VOC concentrations, indicating that the system is having an impact on VOC concentrations following initial soil-vapor extraction.

- The maximum percent increase in benzene concentration occurred at sentinel monitoring well SMW-6-M, which increased from 0.0028 µg/L during the Second Quarter 2009 soil-vapor sampling event to 0.11 µg/L in Third Quarter 2009—still well below the VAL (22 µg/L) for shallow screen intervals of less than 15 feet bgs.
- The maximum percent decrease in benzene concentration occurred at process monitoring well PMW-5-M, which decreased from 2.4J µg/L during the Second Quarter 2009 soil-vapor sampling event to 0.0047 µg/L in Third Quarter 2009. Forty-two locations had a decrease in benzene concentration from Second Quarter 2009 to Third Quarter 2009.
- Of the 336 field methane (with filter) measurements (presented in Table 3-3) that were collected from the Honeywell utility vaults, PSHIA utility vaults, sub-slab monitoring points, manholes, groundwater monitoring wells, PSHIA multi-port monitoring wells, sentinel wells, and process monitoring wells, methane was detected in 68 samples. The highest methane concentration (43.3 percent volume/volume with filter) was measured in process monitoring well PMW-6-ML, located immediately over the historical and current highest areas of soil and groundwater contamination within the southeastern portion of the Phase A BSVE target treatment area near Air Lane.
- Overall, methane concentrations observed during Third Quarter 2009 using either field measurements or sampling and analysis by USEPA Method TO-3 (presented in Table 3-2 and Table 3-3) decreased when compared to Second Quarter 2009 methane concentrations, indicating that the initial soil-vapor extraction from the BSVE system is having an impact on methane concentrations.
- Changes in methane concentrations from subsurface vaults were limited, with most of the vaults remaining the same (non-detect) between Second Quarter 2009 and Third Quarter 2009. Methane was not detected in any of the vaults during Third Quarter 2009.
- Twelve process monitoring or sentinel locations (PMW-8-ML, SMW-13-L, SMW-13-M, SMW-1-L, SMW-4-L, SMW-7-M, SMW-8-M, SMW-8-U, SMW-9-M, SMW-9-U, SVV-1, and SVV-3) showed an increase in methane concentration, and 26 locations showed a decrease in methane concentration between the Second Quarter 2009 and Third Quarter 2009 soil-vapor sampling events.
- The maximum percent increase in methane concentration was observed in the field measurement collected from process monitoring wells PMW-9-U and PMW-9-L, which increased from less than 0.1 percent (non-detect) during Second Quarter 2009 to 0.3 percent in Third Quarter 2009. This is still below the methane action level of 10 percent in a shallow monitoring well. The maximum percent decrease was observed in the sample collected from process monitoring well PMW-6-ML, which decreased from 7.7 percent to less than 0.1 percent (non-detect).
- Among the 60 non-process soil-vapor monitoring well and 20 process soil-vapor monitoring well samples, no risk based corrective action standards (i.e., Tier 1 or Tier 2 VALs) were exceeded.

- The oxygen concentrations exceeded 10 percent for three consecutive weekly readings in all upper and mid ports in the following process monitoring wells: PMW-1, PWM-2, PMW-6, PMW-7, PMW-9, and PMW-10. As a result, the monitoring frequency was reduced from weekly to monthly, as described in Table 8-1 of the BSVE O&M Plan (CH2M HILL, 2009a), for these wells. As of the end of Third Quarter 2009, weekly monitoring continues in process monitoring wells PMW-4 and PMW-5.
- The oxygen, carbon dioxide, TPH, and methane concentrations measured in the field using the RKI Eagle™ portable gas detector correlated well with the concentrations obtained by the laboratory, as presented in Table 3-4.
- Soil-vapor confirmation sampling was conducted in June 2009 for a subset of the soil-vapor field measurements to determine and compare the accuracy and precision of multiple field instruments with analytical laboratory results and thermal oxidizer British Thermal Unit consumption. This was done to determine the optimum field analytical instruments for the Honeywell BSVE project. The results of the soil-vapor confirmation sampling are presented in the *Soil Vapor Field Parameter Collection and Interpretation Technical Memorandum* included in Appendix C. This method was utilized for calculating the mass removal rates by volatilization presented above in Section 2.1.1.
- The Fourth Quarter 2009 field measurement monitoring event for oxygen, carbon dioxide, methane, and percent-LEL at the PSHIA monitoring wells and subsurface utility vaults is scheduled to begin in November 2009 as part of the BSVE O&M soil-vapor monitoring.
- The Fourth Quarter 2009 soil-vapor monitoring is scheduled to be conducted from November 2, 2009 through November 13, 2009. This monitoring includes collection of the soil-vapor samples for VOC analysis by USEPA Method TO-15 and field parameter measurements, as described in Tables 8-1 and 8-2 of the BSVE O&M Plan (CH2M HILL, 2009a).
- Limited oxygen monitoring of process monitoring wells is tentatively scheduled to be conducted during Fourth Quarter 2009 (November 2009). This monitoring will be performed in lieu of *in-situ* respiration testing, which is planned to be conducted during First Quarter 2010.

3.3 Free-product Monitoring

Free-product monitoring during Third Quarter 2009 included the collection of free-product thickness measurements in accordance with the LUST FSP (CH2M HILL, 2008b). In general, any monitoring well with a free-product thickness less than 0.1 foot is measured monthly, and any monitoring well with a free-product thickness greater than 0.1 foot is measured biweekly. Table 3-5 provides free-product thickness measurements collected during the reporting period for all monitoring wells where free product has been observed historically. A comparison of the historical maximum free-product thickness measurements to the September 2009 free-product thickness measurements is provided in Table 3-6, and the September 3, 2009 free-product thicknesses (the last complete monitoring round of the reporting period) are plotted along with the historical areal extent of the free product in Figure 3-1. A summary of the free-product monitoring for the quarter is provided below.

Summary of Free-product Monitoring, Third Quarter 2009:	
Number of wells measured monthly:	56
Number of wells measured biweekly:	2 (July), 1 (August), 2 (September)
Number of wells containing free product during quarterly measurement round:	9
Number of wells historically having contained free product:	32
Maximum thickness measured during the quarterly measurement round:	0.14 foot (ASE-67A)
Number of wells with measurements exceeding 0.75-foot thickness threshold for automatic skimmer installation if thickness was confirmed (see text for discussion)	1 (ASE-107A - 07/21/09, 09/16/09)
Any new historical high measurements for individual monitoring wells?	No
Free product measured for the first time in any wells?	No

Additional items of interest include:

- Through August 4, 2009, the free-product thickness in monitoring well ASE-67A was measured approximately biweekly. During the period June 3, 2009 through August 4, 2009; however, five sequential free-product thickness measurements remained below 0.1 foot. As a result, after August 4, 2009, monitoring well ASE-67A was placed in the monthly monitoring program. During the next monthly monitoring round, on September 3, 2009, a free-product thickness measurement of 0.14 foot was obtained for monitoring well ASE-67A. As a result of this measurement, free product was pumped from monitoring well ASE-67A (0.1 gallon was recovered), and the well was placed under evaluation to be returned to the biweekly monitoring and recovery program pending a second exceedance of the 0.1-foot metric within the 6-week period. A confirmed exceedance of the 0.1-foot metric in monitoring well ASE-67A occurred following the end of Third Quarter 2009 on October 13, 2009 with a free-product thickness measurement of 0.14 foot.
- Historical free-product thickness measurements in Honeywell's monitoring wells show that the cross-gradient extent of the free-product pool can be defined historically by groundwater monitoring wells ASE-54A and ASE-66A to the northwest and by monitoring wells BC-7A and ASE-127A to the southeast. The upgradient (northeast) extent of the free-product pool can be delineated by monitoring wells ASE-59A, ASE-60A, and ASE-61A. According to the historical thickness measurements, the downgradient (south-southwest) extent of the free-product pool can be defined by monitoring wells ASE-46A, PL-201A, ASE-62A, ASE-65A, ASE-126A, ASE-97A, BC-8B, ASE-95A, ASE-124A, ASE-106A, ASE-100A, ASE-101A, ASE-128A, ASE-98A, ASE-99A, ASE-110A, ASE-109A, ASE-123A, ASE-122A, ASE-112A, and ASE-105A, as shown in Figure 3-1. Monitoring wells ASE-108A (installed in March 2005) and ASE-116A (installed in December 2005) have never contained free product but, given their locations either very near a monitoring well containing free product (ASE-108A) or between sets of monitoring wells containing free product (ASE-116A), these wells remain within the

historical extent of free-product delineation illustrated in Figure 3-1 and as part of the target treatment area for the approved remedy.

3.4 Groundwater Monitoring

Groundwater monitoring at the Honeywell facility consists of monthly water-level measurements and quarterly groundwater sampling. These activities and the results for the quarter are discussed in the sections below.

3.4.1 Groundwater Elevations

In accordance with the ADEQ-approved LUST FSP (CH2M HILL, 2008b), Honeywell collects monthly water-level measurements in monitoring wells associated with the CAP. As part of Honeywell's overall groundwater monitoring program, water levels are also measured quarterly in all other Honeywell groundwater monitoring wells. This section presents the results of the September 2009 groundwater monitoring event, including an evaluation of the groundwater levels and related groundwater flow directions in the area associated with the CAP. The September 2009 groundwater elevations and associated water-level contours are presented in Figure 3-2 for the eastern portion of the Honeywell facility and PSHIA property for Sub-unit A. A comparison between the September 2009 water-level elevations to the previous quarter's elevations is presented in Table 3-7. Hydrographs illustrating water-level elevations over time for each of Honeywell's UST monitoring wells are included in Appendix D. A summary of the groundwater elevation evaluation for the quarterly water-level round is provided below.

Summary of Groundwater Elevations, Third Quarter 2009:	
Number of wells associated with the CAP monitored during quarterly round:	56
Percentage of wells with water-level rises compared to last quarterly round:	0%
Minimum rise in water levels:	Not Applicable
Maximum rise in water levels:	Not Applicable
Average rise in water levels:	Not Applicable
Percentage of wells with declining water levels compared to last quarterly round:	100%
Minimum decline in water levels:	0.82 foot (ASE-54A)
Maximum decline in water levels:	2.94 feet (ASE-112A)
Average decline in water levels:	1.88 feet
Overall change in water levels since December 2004 (historical low)	5 to 18 feet higher

Similar to previous time periods, the overall direction of groundwater flow in the eastern portion of the Honeywell facility and PSHIA property was to the southwest, with a more westerly direction of groundwater flow in the northern portion of the Honeywell facility and south of PSHIA Runway 8-26, as shown in Figure 3-2.

Between Second Quarter and Third Quarter 2009 quarterly water-level monitoring rounds conducted in June and September 2009, respectively, water levels fell in all groundwater monitoring wells associated with the CAP as indicated above and in Table 3-7. During Third Quarter 2009, water levels also declined each month in the majority of monitoring wells. Water levels decreased by an average of 0.59 foot between June and July 2009 in all but two monitoring wells (ASE-100A and ASE-123A). Water levels in these two monitoring wells increased by 0.17 foot and 0.01 foot, respectively, during this time period. Between July and August 2009, water levels decreased by an average of 0.78 foot in all but one monitoring well (ASE-55A). In monitoring well ASE-55A, the water level rose by 3.26 feet between July and August 2009. This water-level rise was anomalous with respect to the other monitoring wells for the same time period and was also not consistent with prior and subsequent water-level trends for that well. Following the anomalous water-level measurement in monitoring well ASE-55A, Facility personnel identified a leaking water line adjacent to the well. Shortly after the leaking water line was shut down, the water level in monitoring well ASE-55A returned to normal levels. Between August and September 2009, water levels declined an average of 0.61 foot in all monitoring wells associated with the CAP.

3.4.2 Groundwater Quality

In accordance with Honeywell's LUST FSP Section 2.1 (Groundwater Monitoring and Sampling Frequency) and Section 2.2 (Groundwater Analysis) (CH2M HILL, 2008b), Honeywell performs quarterly evaluations of the groundwater quality in the area associated with the CAP. Groundwater data presented in this section were generated from samples collected during the Third Quarter 2009 groundwater sampling event conducted in September 2009. Analytical results for the UST monitoring wells sampled are discussed below and are presented in Table 3-8.

Groundwater samples were not collected from monitoring wells ASE-19A and BC-18 during the September 2009 sampling event because there was not a sufficient amount of groundwater in the monitoring well casings to collect representative samples. Consistent with the LUST FSP Section 2.1 (Groundwater Monitoring and Sampling Frequency) (CH2M HILL, 2008b), which was approved by ADEQ on October 21, 2008 (ADEQ, 2008b), groundwater samples were also not collected from 11 monitoring wells containing free product in the well casing at the time of water-quality sampling (ASE-52A, ASE-67A, ASE-89A, ASE-90A, ASE-91A, ASE-102A, ASE-107A, ASE-111A, ASE-114A, ASE-115A, and ASE-130A).

Plan view concentration plots are provided for those jet fuel compounds that were detected at concentrations exceeding established standards during the quarter. Figures 3-3 through 3-6 present plan view concentration plots of the following constituents based on the September 2009 sampling event:

- Benzene
- MTBE
- Naphthalene
- Total recoverable petroleum hydrocarbons

These plots present concentration contours that delineate areas exceeding regulatory standards or guidance levels and standard laboratory detection limits, except for the plot of

total recoverable petroleum hydrocarbons which includes an arbitrary concentration contour of 1,000 µg/L. The plots of benzene, MTBE, and naphthalene contain contours for both the current and previous quarter allowing for the evaluation of plume changes and stability.

Hydrographs illustrating concentrations of benzene, MTBE, and naphthalene over time for each of Honeywell's UST monitoring wells are included in Appendix D, and a brief discussion of these compounds' results from the September 2009 sampling event is presented below. Complete laboratory analytical reports and the DQE for all groundwater samples collected during Third Quarter 2009 are contained in Appendix E.

In addition to the petroleum hydrocarbon-related compounds discussed above, Appendix F of this report also presents plots of total trichloroethene (TCE) (sum of TCE and its daughter products, cis-1,2-dichloroethene and vinyl chloride) and total trichloroethane (TCA) (sum of 1,1,1-TCA and its daughter products, 1,1-dichloroethane, 1,1-dichloroethene, and chloroethane). These compounds are noted as primary contaminants of concern for the overall Motorola 52nd Street Superfund site. As part of Honeywell's focused remedial investigation and focused feasibility study, Honeywell has committed to evaluating the benefits of the BSVE system in addressing the chlorinated VOCs found in the subsurface.

Further discussions of non-fuel VOC detections in groundwater, including detections of chlorinated VOCs in groundwater at and around the Honeywell facility, are included in Honeywell's annual CERCLA groundwater monitoring reports associated with the Facility's focused feasibility study and its obligations under the Administrative Order on Consent with the ADEQ Federal Projects Unit (ADEQ, 1999). The most recent groundwater monitoring report was submitted to ADEQ's Federal Projects Unit in March 2009 (CH2M HILL, 2009c). The 2009 Annual Groundwater Monitoring Report describing the results of the overall September 2009 groundwater sampling event is scheduled for submittal to ADEQ in late February or early March 2010.

A summary of the groundwater analytical results for benzene, MTBE, and naphthalene are provided below followed by a brief discussion of each contaminant.

Summary of Groundwater Analytical Results, Third Quarter 2009:	
Number of UST wells sampled (includes CERCLA well ASE-84A):	44
Maximum benzene concentration:	1,400 µg/L (ASE-63A)
Greatest increase in benzene concentration from previous quarter:	5 µg/L (ASE-37A)
Greatest decrease in benzene concentration from previous quarter:	300 µg/L (ASE-63A)
Number of wells with benzene concentrations exceeding USEPA maximum contaminant level of 5 µg/L:	9
Maximum MTBE concentration:	210 µg/L (ASE-92A))
Greatest increase in MTBE concentration from previous quarter:	47 µg/L (BC-8B)
Greatest decrease in MTBE concentration from previous quarter:	48 µg/L (ASE-63A)
Number of wells with MTBE concentrations exceeding ADEQ-recommended Tier 1 remedial level of 94 µg/L:	2
Number of wells with MTBE concentrations exceeding ADEQ's	14

Summary of Groundwater Analytical Results, Third Quarter 2009:	
investigative level of 20 µg/L:	
Maximum naphthalene concentration:	190J µg/L (ASE-63A)
Greatest increase in naphthalene concentration from previous quarter:	14 µg/L (ASE-64A)
Greatest decrease in naphthalene concentration from previous quarter:	38 µg/L (ASE-116A)
Number of wells with naphthalene concentrations exceeding ADEQ health-based guidance level of 280 µg/L:	0
Number of wells with naphthalene concentrations exceeding ADEQ Tier 1 Corrective Action standard of 6.5 µg/L:	9

3.4.2.1 Benzene

Benzene was detected in groundwater throughout the eastern portion of the Honeywell facility and on PSHIA property in September 2009, generally consistent with the historical areal extent of the free-product pool and historical groundwater data. The maximum concentration of benzene in September 2009 occurred in monitoring well ASE-63A (1,400 µg/L), as shown in Figure 3-3. This concentration was lower than the previous quarter's maximum benzene concentration (1,700 µg/L) that also occurred in monitoring well ASE-63A. Consistent with the data from June 2009 and prior sampling rounds, the highest benzene concentrations in September 2009 occurred in monitoring wells associated with the Area 2 fuel farm (1,400 µg/L at ASE-63A, 470 µg/L at ASE-38A, and 200 µg/L at ASE-116A). Concentrations of benzene exceeding the USEPA maximum contaminant level (MCL) (5 µg/L) were detected on the Honeywell facility in September 2009 and historically beneath the northern portion of PSHIA, as shown in Figure 3-3.

The September 2009 benzene concentrations were generally similar to the June 2009 benzene concentrations, with some variability across the monitored area. Benzene was not detected in two monitoring wells in September 2009 that had detectable levels of benzene in June 2009 (1.8 µg/L at ASE-65A and 0.9 µg/L at BC-8B).

Given the southwesterly direction of groundwater flow in the area, the extent of benzene concentrations exceeding the MCL continues to be delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells PL-2101 and ASE-54A to the northwest and by monitoring wells ASE-127A and BC-7A to the southeast, as illustrated in Figure 3-3. The downgradient (south-southwest) extent of benzene exceeding the MCL is delineated by monitoring wells ASE-62A, ASE-65A, BC-18, ASE-126A, ASE-97A, BC-8B, ASE-95A, ASE-124A, ASE-96A, ASE-106A, ASE-99A, ASE-110A, and ASE-113A. Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of benzene, as indicated in Figure 3-3. The areal extent of the benzene plume has generally not changed since quarterly UST groundwater monitoring began in December 2005, indicating that the benzene plume associated with releases from the Honeywell facility is stable.

3.4.2.2 Methyl Tert-Butyl Ether

Consistent with previous sampling rounds, MTBE was detected in groundwater samples collected from the eastern portion of the Honeywell facility and PSHIA property in September 2009. The maximum concentration of MTBE in September 2009 occurred in monitoring well ASE-92A (210 µg/L), as shown in Figure 3-4. This concentration was greater than the June 2009 maximum MTBE concentration (130 µg/L) that was detected in monitoring wells ASE-52A and ASE-63A. The previous MTBE concentration measured in monitoring well ASE-92A was 190 µg/L in December 2008 (monitoring well ASE-92A was not sampled in March 2009 and June 2009 due to the presence of free product in the well at the time of sampling).

Concentrations of MTBE exceeding its ADEQ-recommended Tier 1 remedial level of 94 µg/L—the remedial level that should be used when an existing drinking water receptor is not affected or is not potentially affected by MTBE (ADEQ, 2002)—were detected in monitoring wells located on both the Honeywell facility and PSHIA property (210 µg/L at ASE-92A and 140 µg/L at BC-8B), as shown in Figure 3-4.

In general, changes in concentrations of MTBE in September 2009 were variable as compared to the previous quarter for monitoring wells located on the Honeywell facility and PSHIA property. In September 2009, MTBE was detected in two monitoring wells (1.1 µg/L at ASE-106A and 0.5 µg/L at ASE-127A) that did not have detectable concentrations of MTBE during the previous sampling round conducted in June 2009.

Given the south-southwesterly direction of groundwater flow in the area, the extent of MTBE concentrations exceeding its Tier 1 remedial level (94 µg/L) is delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells ASE-68A and PL-2101 to the northwest and by monitoring wells ASE-38A, ASE-37A, ASE-63A, ASE-127A, and ASE-105A to the southeast. The downgradient (south-southwest) extent of MTBE exceeding its Tier 1 remedial level is delineated by monitoring wells PL-201A, ASE-108A, PL-105A, ASE-97A, ASE-95A, ASE-124A, ASE-100A, ASE-96A, ASE-101A, and ASE-106A. Additional monitoring wells on and downgradient of the Honeywell facility did not contain detectable levels of MTBE.

Based on the September 2009 data, the extent of the MTBE plume on PSHIA property continues to be delineated to 20 µg/L (ADEQ's investigative level) to the southwest, south, southeast, and east by monitoring wells ASE-125A, ASE-129A, ASE-95A, ASE-103A, ASE-100A, ASE-128A, ASE-101A, ASE-99A, ASE-106A, ASE-113A, and ASE-105A. West of monitoring wells ASE-126A and BC-18, the September 2009 MTBE plume is delineated to 20 µg/L by Honeywell CERCLA monitoring well ASE-84A (2.5 µg/L). This well is not associated with the CAP; however, as discussed in the First Quarter Status Report for 2009 (CH2M HILL, 2009d), Honeywell plans to collect quarterly groundwater samples from monitoring well ASE-84A (as necessary) to evaluate the extent of the MTBE plume on PSHIA property west of monitoring wells ASE-126A and BC-18.

3.4.2.3 Naphthalene

Naphthalene was detected in groundwater at the Honeywell facility and beneath PSHIA property at locations generally consistent with where it has historically been observed, as

shown in Figure 3-5. The maximum concentration of naphthalene in September 2009 occurred in monitoring well ASE-63A (190J µg/L) located south of the Area 2 fuel farm. This concentration was greater than the June 2009 maximum naphthalene concentration (180 µg/L), also detected in monitoring well ASE-63A. Other naphthalene concentrations detected in monitoring wells in September 2009 ranged from 10J µg/L (ASE-37A) to 72 µg/L (ASE-116A); there were no concentrations detected that exceeded the ADEQ-recommended health-based guidance level (280 µg/L). As such, there is no 280 µg/L contour illustrated in Figure 3-5.

Naphthalene was not detected in two monitoring wells (ASE-65A and ASE-97A) in September 2009 that had detectable levels of naphthalene (4.0 µg/L and 4.9 µg/L, respectively) during the previous sampling round (June 2009).

Given the southwesterly direction of groundwater flow in the area, the extent of naphthalene concentrations exceeding the ADEQ Tier 1 corrective action standard of 6.5 µg/L is delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells ASE-68A, PL-2101, and ASE-54A to the northwest and by monitoring wells ASE-127A and BC-7A to the southeast, as illustrated in Figure 3-5. The downgradient (south-southwest) extent of naphthalene exceeding 6.5 µg/L is delineated by monitoring wells ASE-58A, PL-201A, ASE-62A, ASE-65A, ASE-126A, ASE-97A, ASE-95A BC-8B, ASE-124A, ASE-96A, ASE-106A, ASE-99A, ASE-110A, and ASE-113A. Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of naphthalene, as indicated in Figure 3-5. The areal extent of the naphthalene plume has generally not changed since quarterly UST groundwater monitoring began in December 2005, indicating that the naphthalene plume associated with releases from the Honeywell facility is stable.

3.5 Data Quality Evaluation

Routine verification of 100 percent of the laboratory data was performed on Third Quarter 2009 soil-vapor and groundwater sampling data in accordance with Section 7.1 of the *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2007b). The analytical verification process included a review of chain-of-custody records, sample holding times, trip blank and equipment blank results, field duplicate sample results, laboratory reagent blank results, and matrix spike/matrix spike duplicate results. The DQEs are presented in Appendix B (soil vapor) and Appendix E (groundwater), and the overall findings are summarized below.

3.5.1 Summary of Soil-vapor Data Quality Evaluation Findings

The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for Third Quarter 2009 soil-vapor data:

- No data were rejected, and completeness was 100 percent for all method/analyte combinations.
- No data were qualified due to low-level blank contamination.

- Samples were analyzed diluted, resulting in raised reporting limits for non-detected analytes.
- Field duplicate relative percent difference exceedances were observed for USEPA Methods TO-3M and TO-15; 54 results were qualified as estimated.
- Surrogate recovery exceedances were observed in three samples for USEPA Method TO-15; 41 results were qualified as estimated. These surrogate recovery exceedances are likely due to matrix interference.
- Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that data are usable for project objectives.

3.5.2 Summary of Groundwater Data Quality Evaluation Findings

Water quality samples were collected from 131 monitoring wells between September 8, 2009 and September 18, 2009 because the Third Quarter 2009 UST water quality sampling round coincides with the sitewide CERCLA annual groundwater sampling event. Forty-three of these monitoring wells were sampled as part of the quarterly UST monitoring program in accordance with the LUST FSP (CH2M HILL, 2008b). In addition, the groundwater sample collected from CERCLA monitoring well ASE-84A was included in the analytical data evaluation (this sample was used to support the delineation of the MTBE plume). The full DQE presented in Appendix E and the DQE summary provided below cover all groundwater samples collected in September 2009, including those sampled and analyzed as part of Honeywell's CERCLA groundwater monitoring program and focused feasibility study. As such, some of the DQE findings discussed below refer to analytical methods not associated with the quarterly UST groundwater monitoring program.

The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for Third Quarter 2009 groundwater data:

- No data were rejected, and completeness was 100 percent for all method/analyte combinations.
- Less than 1 percent of the USEPA Method SW8260B data were qualified due to low-level field blank contamination. The degree to which blank contamination was observed is within reasonable method expectations.
- Samples were analyzed diluted for USEPA Methods E300.0, E310.1, SW6020, SW8260B and SW8270C-SIM, resulting in raised reporting limits for non-detected analytes.
- Four samples for USEPA Method SW7196A and 11 samples for USEPA Method SM3500 were analyzed outside of holding time. Fifteen results were qualified as estimated.
- Initial and continuing calibration exceedances were observed for USEPA Method SW8260B; 162 results were qualified as estimated.
- Field duplicate relative percent difference exceedances were observed for USEPA Method SW8260B; two results were qualified as estimated.
- Surrogate recovery exceedances were observed in 13 samples for USEPA Method SW8260B; 48 results were qualified as estimated.

- Laboratory control sample recovery exceedances were observed for USEPA Method SW8260B; 22 results were qualified as estimated.
- Matrix spike/matrix spike duplicate recovery exceedances were observed for USEPA Methods SW6020, SW7196A, and SW8260B; 12 results were qualified as estimated.
- Serial dilution relative percent difference exceedances were observed for USEPA Method SW6020; two results were qualified as estimated.
- Two USEPA Method SW6020 analytes were detected at higher concentrations in the dissolved sample than in the total sample; four results were qualified as estimated.
- Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives.

4.0 Contingency Triggers and Measures

This section describes Honeywell's contingency planning in accordance with the CAP (CH2M HILL, 2004a-b). Per the CAP, Honeywell is identifying circumstances during monitoring and remediation activities that could trigger the need for contingency measures. Honeywell has also worked with the COP to evaluate operational considerations that could impact the operations at PSHIA and the efficacy of the BSVE system. Table 4-1 details the contingency triggers associated with the vadose zone monitoring and remediation and the free-product monitoring and recovery, along with the contingency measures taken during the quarter. Table 4-1 also includes metrics and contingency measures established in the CAP (CH2M HILL, 2004a-b) and the LUST FSP (CH2M HILL, 2008b) for free-product monitoring and recovery. Contingency triggers associated with the dissolved-phase contaminants of concern will be evaluated following approval of the groundwater component of Honeywell's CAP.

As reported during Second Quarter 2009, Honeywell evaluated the impact of rising groundwater levels in the Phase C and D areas. For the Phase C design, three additional injection/extraction wells were added, bringing the total well count to 10. For Phase D, Honeywell provided COP with a short list of alternatives to address the submerged free product. Honeywell is preparing a detailed alternatives evaluation report incorporating input received from the COP. For Phases A and B, continued extraction operations, along with initiation of air injection activities, will occur.

As described in Section 3.3, the free-product thickness in monitoring well ASE-107A exceeded the CAP metric of 0.75 foot for installing a dedicated, automatic free-product pump during Third Quarter 2009. As stated in Table 4-1, a dedicated, automatic free-product pump was not installed in monitoring well ASE-107A because installation of recovery equipment in that well would cause disruption to airport operations. As stipulated in the CAP and LUST FSP, and pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (in regard to the initial occurrence of a metric exceedance in monitoring well ASE 107A), Honeywell plans on continuing biweekly manual free-product recovery from monitoring well ASE-107A (subject to PSHIA operations' site access approval) whenever free-product thicknesses in monitoring well ASE-107A exceed a thickness of 0.1 foot. In the future however, Honeywell may include the option to install automatic free-product skimmer equipment in appropriate monitoring wells, including ASE-107A, located south of PSHIA runway 8-26 as part of the remedial design for Phase D.

5.0 References

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Tables

TABLE 2-1

Free-product Recovery Details, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Well	Gallons Recovered during Third Quarter 2009	Total Gallons Recovered via Skimming through Third Quarter 2009
ASE-19A	0	50
ASE-20A	NA	4,104
ASE-37A	0	2
ASE-38A	0	47
ASE-39A	NA	0.7
ASE-41A	NA	27
ASE-51A	NA	105
ASE-52A	0	20
ASE-53A	NA	481
ASE-55A	0	3
ASE-56A	NA	663
ASE-57A	NA	685
ASE-58A	0	0
ASE-63A	0	0
ASE-64A	0	32
ASE-67A	0.1	352
ASE-68A	0	75
ASE-89A	0	139
ASE-90A	0	7
ASE-91A	0	0
ASE-92A	0	0
ASE-96A	0	1
ASE-102A	0	147
ASE-107A	3.3	30
ASE-111A	0	13
ASE-113A	0	0
ASE-114A	0	0.4
ASE-115A	0	3
ASE-130A	0	0.3
PL-101A	NA	291
PL-105A	0	6
PL-2101	0	0.02
Total	3.4	7,283

Notes:
This table includes all wells that have historically had measureable free product.
Rounding may affect totals shown in far right column and totals at bottom of table.
NA = Not available due to connection to the BSVE system.

TABLE 3-1

Summary of TO-15 Detected Analytical Results for Soil-vapor Samples - Comparison of Shallow Monitoring Points (<15 feet) to Vapor Action Levels, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CHCL3	DCA	DCE	EBZ	TCFM	DCDFM	TCTFE	C6HT	PCE	111TCA	TCE	124TMBZ	135TMBZ	mp-XYL	XYL
Tier 1 Vapor Action Levels :		**22**	**7**	**NA**	**NA**	**6215**	**NA**	**NA**	**NA**	**1192**	**28**	**NA**	**84**	**37**	**37**	**43474**	**NA**
Tier 2 Vapor Action Levels :		**218**	**72**	**NA**	**NA**	**62154**	**NA**	**NA**	**NA**	**11918**	**282**	**NA**	**844**	**367**	**367**	**434741**	**NA**
Process Monitoring Wells																	
PMW-1-U	09/03/09	<0.0056	0.01	0.034	<0.007	<0.0077	<0.0099	<0.0087	0.03	<0.0062	0.015	0.019	<0.0095	<0.0087	<0.0087	<0.0077	<0.015
PMW-2-U	09/03/09	<0.0037	<0.0056	<0.0047	<0.0046	<0.005	0.019	<0.0057	0.024	<0.0041	0.0097	<0.0063	0.16	<0.0057	<0.0057	<0.005	<0.01
PMW-3-U	09/03/09	0.0037	<0.0048	<0.0039	<0.0039	<0.0042	0.013	<0.0048	0.061	<0.0034	0.054	<0.0053	0.23	<0.0048	<0.0048	<0.0042	<0.0085
PMW-4-U	09/04/09	0.024	0.39	<0.0062	<0.006	<0.0066	<0.0085	<0.0075	<0.012	0.0098	<0.01	0.014	<0.0082	<0.0075	<0.0075	<0.0066	<0.013
PMW-5-U	09/05/09	0.043	<0.0064	<0.0053	<0.0052	<0.0057	<0.0074	<0.0065	<0.01	0.006	0.017	<0.0072	<0.0071	0.0075	<0.0065	<0.0057	<0.011
PMW-6-U	09/02/09	<0.0035	<0.0053	<0.0044	<0.0043	0.01	<0.0061	<0.0053	<0.0083	<0.0038	0.03	0.011	0.0085	0.11	0.025	0.0099	0.0099
PMW-7-U	09/03/09	0.061	<0.0056	<0.0046	<0.0045	0.0077	<0.0064	<0.0056	<0.0087	0.0088	0.022	<0.0062	<0.0061	0.034	<0.0056	0.02	0.02
PMW-8-U	09/04/09	<0.004	<0.0061	<0.005	<0.0049	<0.0054	<0.007	<0.0061	<0.0095	0.068	<0.0084	<0.0068	<0.0067	0.011	<0.0061	0.011	0.011
PMW-9-U	09/14/09	0.0055	0.038	<0.0042	<0.0041	0.022	<0.0058	<0.0051	<0.0079	0.017	<0.007	<0.0056	<0.0056	0.11	0.027	0.026	0.026
PMW-10-U	09/03/09	0.0065	<0.0065	0.024	0.02	<0.0058	<0.0075	<0.0066	<0.01	<0.0047	0.085	<0.0073	0.19	<0.0066	<0.0066	<0.0058	<0.012
Sentinel Wells																	
P-28-U	09/11/09	<0.0033	<0.005	<0.0041	<0.004	0.012	<0.0057	<0.005	<0.0078	<0.0036	0.11	<0.0056	<0.0055	0.046	0.0077	0.0075	0.0075
P-30-U	09/12/09	<0.0035	<0.0053	<0.0044	<0.0043	0.0085	<0.0061	<0.0054	0.02	<0.0038	0.027	<0.0059	<0.0059	0.03	<0.0054	0.0052	0.0052
P-46-U	09/12/09	<0.0033	<0.005	<0.0042	<0.0041	0.014	<0.0058	<0.0051	<0.0079	0.0038	<0.007	<0.0056	0.027	0.048	0.0085	0.0087	0.0087
SMW-1-U	09/07/09	0.0097	<0.0058	0.039	<0.0047	<0.0052	<0.0067	<0.0059	<0.0091	0.01	0.0084	<0.0065	<0.0064	0.0091	<0.0058	0.0055	0.0055
SMW-3-U	09/07/09	<0.0078	0.042	<0.0098	<0.0096	<0.011	<0.014	<0.012	<0.019	<0.0086	<0.016	<0.013	<0.013	<0.012	<0.012	<0.011	<0.021
SMW-4-U	09/12/09	<0.021	<0.032	0.044	<0.026	0.067	<0.037	<0.032	1.8	<0.023	0.093	<0.036	2.7	0.56	0.11	0.088	0.088
SMW-5-U	09/11/09	0.0058	<0.0074	<0.0061	<0.006	0.028	<0.0085	<0.0075	<0.012	0.016	2.8	<0.0083	0.016	0.091	0.017	0.017	0.017
SMW-6-U	09/11/09	0.0089	0.011	<0.0044	0.0046	0.013	0.0077	<0.0053	<0.0083	<0.0038	0.17	<0.0059	0.26	0.051	0.0085	0.0083	0.0083
SMW-7-U	09/11/09	0.011	<0.0057	<0.0047	<0.0046	0.011	<0.0066	<0.0058	<0.009	<0.0041	0.013	<0.0064	0.017	0.043	0.0074	0.0071	0.0071
SMW-8-U	09/03/09	0.008	<0.0049	<0.0041	0.007	0.013	0.016	<0.005	0.036	0.0055	0.084	<0.0055	0.052	0.045	0.0086	0.0082	0.0082
SMW-9-U	09/03/09	0.014	<0.0051	<0.0042	<0.0041	0.024	<0.0059	<0.0052	<0.008	0.011	0.025	<0.0057	0.0087	0.084	0.016	0.014	0.014
SMW-10-U	09/02/09	<0.0034	<0.0052	<0.0043	<0.0042	0.0063	<0.0059	<0.0052	<0.0081	<0.0037	0.012	<0.0058	<0.0057	0.07	0.016	0.0073	0.0073
SMW-11-U	09/03/09	0.009	<0.0048	<0.004	<0.0039	0.039	0.034	0.043	0.033	0.023	0.011	<0.0054	<0.0053	0.11	0.03	0.034	0.034
SMW-12-U	09/03/09	0.0072	<0.0051	<0.0042	<0.0041	0.013	0.0068	<0.0051	<0.0079	0.006	0.049	<0.0056	<0.0056	0.048	0.0095	0.0077	0.0077
SMW-13-U	09/02/09	0.035	<0.0052	<0.0043	<0.0042	0.064	0.009	0.02	<0.0081	0.034	0.085	<0.0058	<0.0057	0.19	0.041	0.037	0.037
SMW-14-U	09/03/09	0.0099	<0.0049	<0.0041	<0.004	0.018	0.022	0.047	0.01	0.007	0.06	<0.0055	<0.0054	0.067	0.012	0.011	0.011

TABLE 3-1

Summary of TO-15 Detected Analytical Results for Soil-vapor Samples - Comparison of Shallow Monitoring Points (<15 feet) to Vapor Action Levels, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Notes:

All results are reported in micrograms per liter.
Maximum concentration between primary samples and field duplicates is shown.
--- = Not analyzed
NA = Not available
U = Not detected at the reported detection limit
J = Estimated value

BZ = Benzene
CHCL3 = Chloroform
DCA = 1,1-Dichloroethane
DCE = 1,1-Dichloroethene
EBZ = Ethylbenzene
TCFM = Trichlorofluoromethane
DCDFM = Dichlorodifluoromethane
TCTFE = 1,1,2-Trichlorotrifluoroethane
C6HT = n-Hexane
PCE = Tetrachloroethene
111TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
124TMBZ = 1,2,4-Trimethylbenzene
135TMBZ = 1,3,5-Trimethylbenzene
mp-XYL = Xylenes, m & p
XYL = Total xylenes

TABLE 3-2
Summary of TO-15 Detected Analytical Results for Soil-vapor Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CET	CHCL3	DCA	12DCA	DCE	C12DCE	EBZ	TCFM	DCDFM	TCTFE	C6HT	MTBE	CH2Cl2	PCE	TOL	111TCA
BSVE Air Treatment System																		
BSVE-INLET	09/03/09	4.1 J	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Process Monitoring Wells																		
PMW-1-U	09/03/09	<0.0056	<0.0047	0.01	0.034	<0.0071	<0.007	<0.007	<0.0077	<0.0099	<0.0087	0.03	<0.0062	<0.0064	<0.0061	0.015	<0.0067	0.019
PMW-1-M	09/03/09	<0.0045	<0.0037	<0.0069	0.039	<0.0057	<0.0056	<0.0056	<0.0061	0.011	<0.007	0.02	<0.005	<0.0051	<0.0049	0.011	<0.0053	0.025
PMW-2-U	09/03/09	<0.0037	<0.003	<0.0056	<0.0047	<0.0047	<0.0046	<0.0046	<0.005	0.019	<0.0057	0.024	<0.0041	<0.0042	<0.004	0.0097	<0.0044	<0.0063
PMW-2-M	09/03/09	<0.0032	<0.0027	<0.005	<0.0041	<0.0041	<0.004	<0.004	<0.0044	0.0093	<0.005	<0.0078	<0.0036	<0.0037	<0.0035	<0.0069	<0.0038	<0.0055
PMW-3-U	09/03/09	0.0037	<0.0026	<0.0048	<0.0039	<0.0039	<0.0039	<0.0039	<0.0042	0.013	<0.0048	0.061	<0.0034	<0.0035	<0.0034	0.054	<0.0037	<0.0053
PMW-3-M	09/03/09	0.086 J	<0.0037	0.0056	<0.0056	<0.0056	<0.0055	<0.0055	<0.0061	0.025	<0.0069	0.1	0.64 J	<0.005	<0.0048	0.045	<0.0053	0.013
PMW-4-U	09/04/09	0.024	<0.004	0.39	<0.0062	<0.0062	<0.006	<0.006	<0.0066	<0.0085	<0.0075	<0.012	0.0098	<0.0055	<0.0053	<0.01	<0.0057	0.014
PMW-4-M	09/04/09	<0.0037	<0.0031	0.022	<0.0047	<0.0047	<0.0046	<0.0046	<0.0051	<0.0066	<0.0058	<0.009	<0.0041	<0.0042	<0.0041	<0.0079	<0.0044	<0.0064
PMW-5-U	09/05/09	0.043	<0.0035	<0.0064	<0.0053	<0.0053	<0.0052	<0.0052	<0.0057	<0.0074	<0.0065	<0.01	0.006	<0.0048	<0.0046	0.017	<0.005	<0.0072
PMW-5-M	09/05/09	0.0047	<0.0028	<0.0052	<0.0043	<0.0043	<0.0042	<0.0042	<0.0046	<0.0059	<0.0052	<0.0081	<0.0037	<0.0038	<0.0037	0.017	<0.004	<0.0058
PMW-6-U	09/02/09	<0.0035	<0.0028	<0.0053	<0.0044	<0.0044	<0.0043	<0.0043	0.01	<0.0061	<0.0053	<0.0083	<0.0038	<0.0039	<0.0038	0.03	<0.0041	0.011
PMW-6-M	09/02/09	<0.0045	<0.0037	0.012	0.0095	<0.0057	<0.0056	<0.0056	0.0069	<0.0079	<0.007	<0.011	<0.005	<0.0051	<0.0049	0.023	<0.0053	0.0088
PMW-7-U	09/03/09	0.061	<0.003	<0.0056	<0.0046	<0.0046	<0.0045	<0.0045	0.0077	<0.0064	<0.0056	<0.0087	0.0088	<0.0041	<0.004	0.022	<0.0043	<0.0062
PMW-7-M	09/03/09	<0.0044	<0.0036	<0.0067	<0.0055	<0.0055	<0.0054	<0.0054	<0.0059	<0.0077	<0.0068	<0.01	<0.0048	<0.0049	<0.0047	0.02	<0.0051	<0.0074
PMW-8-U	09/04/09	<0.004	<0.0033	<0.0061	<0.005	<0.005	<0.0049	<0.0049	<0.0054	<0.007	<0.0061	<0.0095	0.068	<0.0045	<0.0043	<0.0084	<0.0047	<0.0068
PMW-8-M	09/04/09	0.0049	<0.004	0.017	<0.0061	<0.0061	<0.006	<0.006	<0.0066	<0.0085	<0.0075	<0.012	0.027	<0.0055	<0.0053	<0.01	<0.0057	<0.0083
PMW-9-U	09/14/09	0.0055	<0.0027	0.038	<0.0042	<0.0042	<0.0041	<0.0041	0.022	<0.0058	<0.0051	<0.0079	0.017	<0.0037	<0.0036	<0.007	<0.0039	<0.0056
PMW-9-M	09/14/09	<0.0034	<0.0028	0.044	<0.0043	<0.0043	<0.0042	<0.0042	0.017	<0.0059	<0.0052	<0.0081	0.011	<0.0038	<0.0037	<0.0072	<0.004	<0.0058
PMW-10-U	09/03/09	0.0065	<0.0035	<0.0065	0.024	<0.0054	0.02	<0.0053	<0.0058	<0.0075	<0.0066	<0.01	<0.0047	<0.0048	<0.0047	0.085	<0.005	<0.0073
PMW-10-M	09/03/09	<0.0031	<0.0026	0.0073	0.078	<0.004	0.033	0.0063	<0.0043	<0.0055	<0.0048	<0.0075	<0.0035	<0.0035	<0.0034	0.061	<0.0037	0.0077
Sentinel Wells																		
BC-7A	09/14/09	0.028	<0.018	0.065	<0.028	<0.028	0.14	<0.027	0.37	<0.039	<0.034	<0.053	0.13	<0.025	<0.024	0.43	0.042	<0.038
BC-18	09/02/09	0.011	<0.0027	0.01	0.33	<0.0041	0.14	0.068	0.0097	0.0067	<0.005	0.019	<0.0036	<0.0037	<0.0035	0.066	<0.0038	<0.0056
PL-102A	09/13/09	0.014	<0.0083	<0.015	0.016	<0.013	<0.012	<0.012	0.18	<0.018	<0.016	0.14	0.039	<0.011	<0.011	<0.021	0.025	<0.017
PL-2102	09/13/09	0.44 J	0.2 J	<0.1	2.9 J	<0.085	<0.084	<0.084	1.9 J	<0.12	<0.1	<0.16	9 J	0.12 J	<0.073	<0.14	<0.08	<0.12
ASE-54A	09/15/09	<0.21	0.38	<0.32	5.1	<0.27	<0.26	3.1	1.5	<0.37	<0.33	1.9	3.6	0.27	<0.23	<0.45	0.35	<0.36
ASE-60A	09/14/09	<0.21 UJ	<0.17 UJ	<0.32 UJ	<0.26 UJ	<0.26 UJ	<0.26 UJ	1.3 J	0.64 J	<0.36 UJ	<0.32 UJ	<0.5 UJ	1.5 J	<0.23 UJ	<0.23 UJ	<0.44 UJ	<0.24 UJ	<0.35 UJ
ASE-61A	09/14/09	<0.043	<0.035	0.17 J	<0.054	<0.054	<0.053	<0.053	0.24	<0.075	<0.066	<0.1	0.097 J	<0.048	<0.046	1.1 J	<0.05	<0.073
ASE-122A	09/03/09	0.0064	<0.0027	<0.0049	<0.0041	<0.0041	0.0096	<0.004	0.013	0.011	0.0064	0.0087	0.0054	<0.0036	<0.0035	0.064	<0.0038	<0.0055
ASE-123A	09/03/09	0.008	<0.0027	0.0099	<0.0041	<0.0041	0.033	0.025	0.014	0.029	0.012	0.02	0.0071	<0.0036	<0.0035	0.15	<0.0038	<0.0055
ASE-124A	09/03/09	0.0077	<0.0027	0.015	0.89	<0.0041	<0.004	0.013	0.0098	0.032	0.0082	0.046	0.0043	0.0037	<0.0035	0.21	<0.0038	<0.0055
ASE-125A	09/02/09	<0.0034	<0.0028	0.024	0.058	<0.0042	0.0087	<0.0042	<0.0046	0.0087	<0.0052	<0.008	<0.0037	<0.0038	<0.0036	0.04	<0.004	<0.0057
ASE-128A	09/02/09	<0.0033	<0.0027	<0.005	<0.0041	<0.0041	<0.0041	<0.0041	0.011	<0.0058	<0.0051	<0.0079	<0.0036	<0.0037	<0.0036	<0.007	0.0049	<0.0056
P-28-U	09/11/09	<0.0033	<0.0027	<0.005	<0.0041	<0.0041	<0.004	<0.004	0.012	<0.0057	<0.005	<0.0078	<0.0036	<0.0037	<0.0035	0.11	<0.0038	<0.0056
P-28-M	09/11/09	<0.0041	<0.0034	0.037	<0.0052	<0.0052	0.058	<0.0051	0.0057	0.022	0.0071	0.014	<0.0045	<0.0047	<0.0045	0.3	<0.0049	0.015
P-28-L	09/11/09	<0.0036	<0.003	0.015	<0.0045	<0.0045	0.036	<0.0044	0.0055	0.014	0.0077	0.016	<0.0039	<0.004	<0.0039	0.19	<0.0042	<0.0061
P-30-U	09/12/09	<0.0035	<0.0029	<0.0053	<0.0044	<0.0044	<0.0043	<0.0043	0.0085	<0.0061	<0.0054	0.02	<0.0038	<0.0039	<0.0038	0.027	<0.0041	<0.0059
P-30-M	09/12/09	0.42 J	<0.11	<0.21	<0.17	<0.17	<0.17	<0.17	16 J	<0.24	<0.21	<0.33	<0.15	<0.15	<0.15	<0.29	<0.16	<0.23
P-30-L	09/12/09	<0.021	<0.017	0.034	0.11	<0.026	0.029	<0.026	0.23	<0.036	<0.032	0.054	<0.023	<0.023	<0.023	0.14	<0.024	<0.035

TABLE 3-2
Summary of TO-15 Detected Analytical Results for Soil-vapor Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CET	CHCL3	DCA	12DCA	DCE	C12DCE	EBZ	TCFM	DCDFM	TCTFE	C6HT	MTBE	CH2Cl2	PCE	TOL	111TCA
Sentinel Wells																		
P-46-U	09/12/09	<0.0033	<0.0027	<0.005	<0.0042	<0.0042	<0.0041	<0.0041	0.014	<0.0058	<0.0051	<0.0079	0.0038	<0.0037	<0.0036	<0.007	<0.0039	<0.0056
P-46-M	09/12/09	<0.0036	<0.003	0.018	0.079	<0.0046	<0.0045	<0.0045	0.0082	0.0086	<0.0056	0.043	<0.004	<0.0041	<0.0039	0.014	0.0085	<0.0062
P-46-L	09/12/09	<0.0035	<0.0029	<0.0053	0.01	<0.0044	<0.0043	<0.0043	0.0088	<0.0061	<0.0054	<0.0083	<0.0038	<0.0039	<0.0038	<0.0074	<0.0041	<0.0059
P-47	09/12/09	<0.0068	<0.0056	0.01	1	<0.0086	<0.0084	<0.0084	0.066	<0.012	<0.01	0.11	<0.0075	<0.0076	<0.0074	<0.014	<0.008	<0.012
SMW-1-U	09/07/09	0.0097	<0.0031	<0.0058	0.039	<0.0048	<0.0047	<0.0047	<0.0052	<0.0067	<0.0059	<0.0091	0.01	<0.0043	<0.0041	0.0084	<0.0045	<0.0065
SMW-1-M	09/07/09	0.025	<0.0032	0.011	0.13	<0.0049	<0.0048	<0.0048	<0.0052	<0.0068	0.0064	<0.0092	<0.0042	<0.0043	<0.0042	0.018	<0.0045	<0.0066
SMW-1-L	09/07/09	<0.27	<0.22	<0.41	0.58	<0.34	<0.33	<0.33	0.56	<0.47	<0.41	<0.64	<0.29	<0.3	<0.29	<0.57	<0.31	<0.46
SMW-2-M	09/13/09	<0.005	<0.0041	0.018	1.4	<0.0063	<0.0062	<0.0062	0.019	<0.0087	<0.0077	0.12	<0.0055	<0.0056	<0.0054	0.02	<0.0059	<0.0085
SMW-3-U	09/07/09	<0.0078	<0.0064	0.042	<0.0098	<0.0098	<0.0096	<0.0096	<0.011	<0.014	<0.012	<0.019	<0.0086	<0.0088	<0.0084	<0.016	<0.0092	<0.013
SMW-3-M	09/07/09	0.093	<0.0029	0.057	<0.0045	<0.0045	<0.0044	<0.0044	<0.0048	0.0089	<0.0054	<0.0084	<0.0039	<0.004	<0.0038	0.013	<0.0041	0.01
SMW-3-L	09/07/09	<0.0037	<0.003	0.26	0.015	<0.0047	0.024	<0.0046	<0.005	0.036	<0.0057	0.055	0.0062	<0.0042	0.0045	0.068	<0.0044	<0.0063
SMW-4-U	09/12/09	<0.021	<0.017	<0.032	0.044	<0.027	<0.026	<0.026	0.067	<0.037	<0.032	1.8	<0.023	<0.024	<0.023	0.093	<0.025	<0.036
SMW-4-M	09/12/09	<0.022	<0.018	0.045	0.15	<0.028	<0.027	<0.027	0.045	<0.039	<0.034	2.2	<0.024	<0.025	<0.024	0.073	<0.026	<0.038
SMW-4-L	09/12/09	<0.043	0.046	<0.065	2.7	<0.054	0.33	<0.053	0.11 J	<0.075	<0.066	4.7	<0.047	<0.048	<0.046	0.15	<0.05	<0.073
SMW-5-U	09/11/09	0.0058	<0.004	<0.0074	<0.0061	<0.0061	<0.006	<0.006	0.028	<0.0085	<0.0075	<0.012	0.016	<0.0055	<0.0053	2.8	<0.0057	<0.0083
SMW-5-M	09/11/09	0.023	<0.0027	<0.0051	<0.0042	<0.0042	<0.0041	<0.0041	0.018	<0.0058	<0.0051	<0.008	0.009	<0.0037	<0.0036	4.7	<0.0039	<0.0057
SMW-6-U	09/11/09	0.0089	<0.0028	0.011	<0.0044	<0.0044	0.0046	<0.0043	0.013	0.0077	<0.0053	<0.0083	<0.0038	<0.0039	<0.0038	0.17	<0.0041	<0.0059
SMW-6-M	09/11/09	0.11	<0.0028	0.027	<0.0043	<0.0043	0.012	<0.0042	0.01	0.013	<0.0052	0.016	<0.0037	<0.0038	<0.0037	0.21	<0.004	0.0077
SMW-6-L	09/11/09	<0.0098	<0.0081	0.11	0.073	<0.012	0.095	0.22	<0.013	0.049	<0.015	0.098	<0.011	<0.011	<0.011	0.33	<0.012	<0.017
SMW-7-U	09/11/09	0.011	<0.0031	<0.0057	<0.0047	<0.0047	<0.0046	<0.0046	0.011	<0.0066	<0.0058	<0.009	<0.0041	<0.0042	<0.0041	0.013	<0.0044	<0.0064
SMW-7-M	09/11/09	0.0042	<0.003	<0.0055	0.031	<0.0046	0.0089	<0.0045	0.0081	<0.0063	<0.0056	<0.0086	<0.004	<0.0041	<0.0039	0.025	<0.0042	0.014
SMW-7-L	09/11/09	<0.02	<0.017	0.072	1.5	0.034	0.98	0.28	<0.028	<0.036	<0.031	<0.049	<0.022	<0.023	<0.022	0.14	<0.024	1.3
SMW-8-U	09/03/09	0.008	<0.0027	<0.0049	<0.0041	<0.0041	0.007	<0.004	0.013	0.016	<0.005	0.036	0.0055	<0.0036	<0.0035	0.084	<0.0038	<0.0055
SMW-8-M	09/03/09	0.025 J	<0.0027	0.016	0.43 J	<0.0042	0.24 J	0.019	0.042 J	0.018	<0.0051	0.038	0.021 J	<0.0037	<0.0036	0.21	<0.0039	<0.0056
SMW-9-U	09/03/09	0.014	<0.0028	<0.0051	<0.0042	<0.0042	<0.0041	<0.0041	0.024	<0.0059	<0.0052	<0.008	0.011	<0.0038	<0.0036	0.025	<0.0039	<0.0057
SMW-9-M	09/03/09	0.009	<0.0027	<0.0051	0.0044	<0.0042	<0.0041	<0.0041	0.017	<0.0058	<0.0051	<0.0079	0.0072	<0.0037	<0.0036	0.011	<0.0039	<0.0056
SMW-9-L	09/03/09	0.011	<0.0027	0.023	0.28	<0.0041	0.062	0.0088	0.016	0.008	<0.005	<0.0078	0.0078	<0.0037	<0.0035	0.12	<0.0038	<0.0055
SMW-10-U	09/02/09	<0.0034	<0.0028	<0.0052	<0.0043	<0.0043	<0.0042	<0.0042	0.0063	<0.0059	<0.0052	<0.0081	<0.0037	<0.0038	<0.0037	0.012	<0.004	<0.0058
SMW-10-M	09/02/09	<0.0033	<0.0027	<0.005	<0.0042	<0.0042	<0.0041	<0.0041	0.0047	<0.0058	<0.0051	<0.0079	<0.0036	<0.0037	<0.0036	0.02	<0.0039	<0.0056
SMW-10-L	09/02/09	<0.0033	<0.0027	<0.005	<0.0041	<0.0041	<0.004	<0.004	<0.0044	0.0073	0.0058	<0.0078	<0.0036	<0.0037	<0.0035	0.037	<0.0038	<0.0056
SMW-11-U	09/03/09	0.009	<0.0026	<0.0048	<0.004	<0.004	<0.0039	<0.0039	0.039	0.034	0.043	0.033	0.023	<0.0036	<0.0034	0.011	<0.0037	<0.0054
SMW-11-M	09/03/09	0.0065	<0.0025	<0.0046	<0.0038	<0.0038	<0.0037	<0.0037	0.028	0.029	0.046	0.031	0.014	<0.0034	<0.0033	0.013	<0.0035	<0.0051
SMW-11-L	09/03/09	0.0059	<0.0026	<0.0049	<0.004	<0.004	<0.004	<0.004	0.017	0.019	0.014	0.012	0.022	<0.0036	<0.0035	0.029	<0.0038	<0.0055
SMW-12-U	09/03/09	0.0072	<0.0027	<0.0051	<0.0042	<0.0042	<0.0041	<0.0041	0.013	0.0068	<0.0051	<0.0079	0.006	<0.0037	<0.0036	0.049	<0.0039	<0.0056
SMW-12-M	09/03/09	0.0059	<0.0026	<0.0048	<0.0039	<0.0039	<0.0039	<0.0039	0.011	0.016	<0.0048	0.017	0.0049	<0.0035	<0.0034	0.078	<0.0037	<0.0053
SMW-13-U	09/02/09	0.035	<0.0028	<0.0052	<0.0043	<0.0043	<0.0042	<0.0042	0.064	0.009	0.02	<0.0081	0.034	<0.0038	<0.0037	0.085	<0.004	<0.0058
SMW-13-M	09/03/09	0.024	<0.0027	<0.005	<0.0042	<0.0042	<0.0041	<0.0041	0.046	0.0078	0.016	<0.0079	0.02	<0.0037	<0.0036	0.057	<0.0039	<0.0056
SMW-13-L	09/03/09	0.021	<0.0028	<0.0051	<0.0042	<0.0042	<0.0041	<0.0041	0.039	0.013	0.0089	<0.008	0.016	<0.0038	<0.0036	0.041	<0.0039	<0.0057
SMW-14-U	09/03/09	0.0099	<0.0027	<0.0049	<0.0041	<0.0041	<0.004	<0.004	0.018	0.022	0.047	0.01	0.007	<0.0036	<0.0035	0.06	<0.0038	<0.0055
SMW-14-M	09/03/09	0.007	<0.0026	<0.0048	<0.004	<0.004	<0.0039	0.0066	0.015	0.034	0.069	0.016	0.0061	<0.0035	<0.0034	0.069	<0.0037	<0.0053
SMW-14-L	09/03/09	0.017	<0.0026	0.005	<0.0039	<0.0039	<0.0038	<0.0038	0.019	0.063	0.035	0.022	0.012	<0.0035	<0.0034	0.092	0.0072	<0.0053

TABLE 3-2
Summary of TO-15 Detected Analytical Results for Soil-vapor Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	TCE	124TMBZ	135TMBZ	VC	mp-XYL	o-XYL	XYL
BSVE Air Treatment System								
BSVE-INLET	09/03/09	---	---	---	8.7 J	---	---	---
Process Monitoring Wells								
PMW-1-U	09/03/09	<0.0095	<0.0087	<0.0087	<0.0045	<0.0077	<0.0077	<0.015
PMW-1-M	09/03/09	<0.0076	<0.0069	<0.0069	<0.0036	<0.0061	<0.0061	<0.012
PMW-2-U	09/03/09	0.16	<0.0057	<0.0057	<0.003	<0.005	<0.005	<0.01
PMW-2-M	09/03/09	0.13	<0.005	<0.005	<0.0026	<0.0044	<0.0044	<0.0088
PMW-3-U	09/03/09	0.23	<0.0048	<0.0048	<0.0025	<0.0042	<0.0042	<0.0085
PMW-3-M	09/03/09	0.22	0.037 J	0.016 J	<0.0036	0.06 J	<0.0061	0.06 J
PMW-4-U	09/04/09	<0.0082	<0.0075	<0.0075	<0.0039	<0.0066	<0.0066	<0.013
PMW-4-M	09/04/09	<0.0063	<0.0058	<0.0058	<0.003	<0.0051	<0.0051	<0.01
PMW-5-U	09/05/09	<0.0071	0.0075	<0.0065	<0.0034	<0.0057	<0.0057	<0.011
PMW-5-M	09/05/09	<0.0057	<0.0052	<0.0052	<0.0027	<0.0046	<0.0046	<0.0092
PMW-6-U	09/02/09	0.0085	0.11	0.025	<0.0028	0.0099	<0.0047	0.0099
PMW-6-M	09/02/09	<0.0076	0.08	0.019	<0.0036	0.0072	<0.0061	0.0072
PMW-7-U	09/03/09	<0.0061	0.034	<0.0056	<0.0029	0.02	<0.005	0.02
PMW-7-M	09/03/09	<0.0073	<0.0067	<0.0067	<0.0035	<0.0059	<0.0059	<0.012
PMW-8-U	09/04/09	<0.0067	0.011	<0.0061	<0.0032	0.011	<0.0054	0.011
PMW-8-M	09/04/09	0.012	0.014	<0.0074	<0.0039	0.01	<0.0066	0.01
PMW-9-U	09/14/09	<0.0056	0.11	0.027	<0.0026	0.026	<0.0045	0.026
PMW-9-M	09/14/09	0.011 J	0.088	0.021	<0.0027	0.02	<0.0046	0.02
PMW-10-U	09/03/09	0.19	<0.0066	<0.0066	<0.0034	<0.0058	<0.0058	<0.012
PMW-10-M	09/03/09	0.17	<0.0048	<0.0048	<0.0025	<0.0043	<0.0043	<0.0085
Sentinel Wells								
BC-7A	09/14/09	<0.037	0.61	0.2	<0.018	0.17	<0.03	0.17
BC-18	09/02/09	0.39	0.026	0.0056	0.0027	<0.0044	<0.0044	<0.0089
PL-102A	09/13/09	<0.017	0.24	0.045	<0.008	0.1	<0.014	0.1
PL-2102	09/13/09	<0.11	1.4 J	0.17 J	1.2 J	0.82 J	<0.092	0.82 J
ASE-54A	09/15/09	3	4.7	1.2	5.7	2.9	<0.29	2.9
ASE-60A	09/14/09	0.41 J	2.5 J	<0.32 UJ	<0.17 UJ	<0.28 UJ	<0.28 UJ	<0.56 UJ
ASE-61A	09/14/09	9.7 J	0.66 J	0.18 J	<0.034	0.12	<0.058	0.12
ASE-122A	09/03/09	<0.0054	0.05	0.0097	<0.0026	0.0081	<0.0044	0.0081
ASE-123A	09/03/09	0.0069	0.054	0.01	<0.0026	0.018	<0.0044	0.018
ASE-124A	09/03/09	0.23	0.036	0.0071	<0.0026	0.0059	<0.0044	0.0059
ASE-125A	09/02/09	0.022	0.017	<0.0052	<0.0027	<0.0046	<0.0046	<0.0091
ASE-128A	09/02/09	<0.0055	0.11	0.025	<0.0026	0.013	0.005	0.018
P-28-U	09/11/09	<0.0055	0.046	0.0077	<0.0026	0.0075	<0.0044	0.0075
P-28-M	09/11/09	0.02	0.019	<0.0063	<0.0033	<0.0056	<0.0056	<0.011
P-28-L	09/11/09	0.0082	0.018	<0.0055	<0.0029	<0.0049	<0.0049	<0.0097
P-30-U	09/12/09	<0.0059	0.03	<0.0054	<0.0028	0.0052	<0.0047	0.0052
P-30-M	09/12/09	<0.23	<0.21	<0.21	<0.11	<0.18	<0.18	<0.37
P-30-L	09/12/09	0.18	<0.032	<0.032	<0.017	<0.028	<0.028	<0.056

TABLE 3-2
Summary of TO-15 Detected Analytical Results for Soil-vapor Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	TCE	124TMBZ	135TMBZ	VC	mp-XYL	o-XYL	XYL
Sentinel Wells								
P-46-U	09/12/09	0.027	0.048	0.0085	<0.0026	0.0087	<0.0045	0.0087
P-46-M	09/12/09	0.064	0.03	<0.0056	<0.0029	0.0052	<0.0049	0.0052
P-46-L	09/12/09	0.014	0.03	<0.0053	<0.0028	0.0056	<0.0047	0.0056
P-47	09/12/09	0.022	0.016	<0.01	<0.0054	<0.0092	<0.0092	<0.018
SMW-1-U	09/07/09	<0.0064	0.0091	<0.0058	<0.003	0.0055	<0.0052	0.0055
SMW-1-M	09/07/09	0.013	<0.0059	<0.0059	<0.0031	<0.0052	<0.0052	<0.01
SMW-1-L	09/07/09	<0.45	<0.41	<0.41	<0.21	<0.36	<0.36	<0.72
SMW-2-M	09/13/09	0.022	0.14	0.032	<0.004	0.023	<0.0068	0.023
SMW-3-U	09/07/09	<0.013	<0.012	<0.012	<0.0062	<0.011	<0.011	<0.021
SMW-3-M	09/07/09	<0.0059	<0.0054	<0.0054	<0.0028	<0.0048	<0.0048	<0.0096
SMW-3-L	09/07/09	0.067	0.0074	<0.0057	<0.003	<0.005	<0.005	<0.01
SMW-4-U	09/12/09	2.7	0.56	0.11	<0.017	0.088	<0.029	0.088
SMW-4-M	09/12/09	5.5	0.39	0.072	<0.018	0.056	<0.03	0.056
SMW-4-L	09/12/09	1.2	0.73	0.14 J	0.11	<0.058	<0.058	<0.12
SMW-5-U	09/11/09	0.016	0.091	0.017	<0.0039	0.017	<0.0066	0.017
SMW-5-M	09/11/09	0.13	0.06	0.011	<0.0027	0.011	<0.0045	0.011
SMW-6-U	09/11/09	0.26	0.051	0.0085	<0.0028	0.0083	<0.0047	0.0083
SMW-6-M	09/11/09	0.39	0.033	0.0056	<0.0027	0.006	<0.0046	0.006
SMW-6-L	09/11/09	1.7	0.036	<0.015	<0.0078	<0.013	<0.013	<0.027
SMW-7-U	09/11/09	0.017	0.043	0.0074	<0.003	0.0071	<0.0051	0.0071
SMW-7-M	09/11/09	0.075	0.03	<0.0055	<0.0029	0.0052	<0.0049	0.0052
SMW-7-L	09/11/09	3.4	0.033	<0.031	<0.016	<0.028	<0.028	<0.055
SMW-8-U	09/03/09	0.052	0.045	0.0086	<0.0026	0.0082	<0.0044	0.0082
SMW-8-M	09/03/09	0.68	0.14 J	0.028 J	<0.0026	0.025 J	<0.0045	0.025 J
SMW-9-U	09/03/09	0.0087	0.084	0.016	<0.0027	0.014	<0.0045	0.014
SMW-9-M	09/03/09	<0.0056	0.062	0.012	<0.0026	0.01	<0.0045	0.01
SMW-9-L	09/03/09	0.092	0.048	0.0088	<0.0026	0.0094	<0.0044	0.0094
SMW-10-U	09/02/09	<0.0057	0.07	0.016	<0.0027	0.0073	<0.0046	0.0073
SMW-10-M	09/02/09	<0.0055	0.053	0.012	<0.0026	0.0052	<0.0045	0.0052
SMW-10-L	09/02/09	<0.0055	0.034	0.0069	<0.0026	<0.0044	<0.0044	<0.0089
SMW-11-U	09/03/09	<0.0053	0.11	0.03	<0.0025	0.034	<0.0043	0.034
SMW-11-M	09/03/09	<0.0051	0.083	0.023	<0.0024	0.024	<0.0041	0.024
SMW-11-L	09/03/09	<0.0054	0.051	0.013	<0.0026	0.017	<0.0043	0.017
SMW-12-U	09/03/09	<0.0056	0.048	0.0095	<0.0026	0.0077	<0.0045	0.0077
SMW-12-M	09/03/09	<0.0052	0.041	0.008	<0.0025	0.0067	<0.0042	0.0067
SMW-13-U	09/02/09	<0.0057	0.19	0.041	<0.0027	0.037	<0.0046	0.037
SMW-13-M	09/03/09	<0.0055	0.14	0.03	<0.0026	0.027	<0.0045	0.027
SMW-13-L	09/03/09	<0.0056	0.12	0.025 J	<0.0027	0.023	<0.0045	0.023
SMW-14-U	09/03/09	<0.0054	0.067	0.012	<0.0026	0.011	<0.0044	0.011
SMW-14-M	09/03/09	<0.0053	0.059	0.011	<0.0025	0.01	<0.0043	0.01
SMW-14-L	09/03/09	<0.0052	0.067	0.013	<0.0025	0.015	<0.0042	0.015

TABLE 3-2
Summary of TO-15 Detected Analytical Results for Soil-vapor Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Notes:

All results are reported in micrograms per liter.
Maximum concentration between primary samples and field duplicates is shown.
--- = Not analyzed
NA = Not available
U = Not detected at the reported detection limit
J = Estimated value

BZ = Benzene
CET = Chloroethane
CHCL3 = Chloroform
DCA = 1,1-Dichloroethane
12DCA = 1,2-Dichloroethane
DCE = 1,1-Dichloroethene
C12DCE = cis-1,2-Dichloroethene
EBZ = Ethylbenzene
TCFM = Trichlorofluoromethane
DCDFM = Dichlorodifluoromethane
TCTFE = 1,1,2-Trichlorotrifluoroethane
C6HT = n-Hexane
MTBE = Methyl tert-butyl ether
CH2Cl2 = Methylene chloride
PCE = Tetrachloroethene
TOL = Toluene
111TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
124TMBZ = 1,2,4-Trimethylbenzene
135TMBZ = 1,3,5-Trimethylbenzene
VC = Vinyl chloride
mp-XYL = Xylenes, m & p
o-XYL = Xylenes, o
XYL = Total xylenes

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
BSVE Air Treatment System																
BSVE-INLET	07/02/09	8:35	NA	NA	NA	5.7	9.3	3.3	22.2	66	>100	33,744.0	46,391.7	-25	NM	NM
BSVE-INLET	07/03/09	14:21	NA	NA	NA	8.8	7.9	2	7	40	>100	20,572.5	26,684.2	-45	NM	NM
BSVE-INLET	07/04/09	13:19	NA	NA	NA	6.2	8.3	2.6	9.4	52	>100	28,050.0	37,446.0	-10	NM	NM
BSVE-INLET	07/25/09	9:31	NA	NA	NA	5.4	9.8	3.5	19.3	70	>100	NM	NM	-17	NM	NM
BSVE-INLET	07/27/09	11:10	NA	NA	NA	5.2	9.7	3.2	16.6	64	>100	28,996.9	45,658.2	-20	NM	NM
BSVE-INLET	07/27/09	11:24	NA	NA	NA	5.2	9.7	NM	NM	NM	NM	NM	45,658.2	-20	NM	NM
BSVE-INLET	07/28/09	7:59	NA	NA	NA	3.6	11.5	4.7	19.4	94	>100	23,133.7	34,624.1	-28	NM	NM
BSVE-INLET	07/31/09	13:34	NA	NA	NA	6.2	10.0	2.6	14.9	52	>100	13,234.9	21,094.5	-50	NM	NM
BSVE-INLET	08/01/09	10:12	NA	NA	NA	8.3	9.1	1.7	11.8	32	>100	20,583.0	29,484.0	-46	NM	NM
BSVE-INLET	08/02/09	10:23	NA	NA	NA	8.2	9.1	1.8	11.7	36	>100	17,378.8	28,170.9	-48	NM	NM
BSVE-INLET	08/03/09	8:53	NA	NA	NA	11.0	7.6	1.3	8.7	26	>100	17,946.2	27,980.1	-42	NM	NM
BSVE-INLET	08/04/09	6:58	NA	NA	NA	10.4	7.5	2.1	10.4	38	>100	24,454.9	32,939.7	-40	NM	NM
BSVE-INLET	08/05/09	9:04	NA	NA	NA	13.7	5.2	6.9	4.6	16	92	12,324.6	16,687.6	-42	NM	NM
BSVE-INLET	08/06/09	8:41	NA	NA	NA	13.7	5.4	1.2	6.1	22	>100	13,517.0	17,259.6	-40	NM	NM
BSVE-INLET	08/07/09	7:13	NA	NA	NA	13.5	5.5	0.8	5.7	18	>100	14,598.2	24,550.5	-44	NM	NM
BSVE-INLET	08/08/09	7:34	NA	NA	NA	11.8	6.5	1.3	6.7	26	>100	14,434.9	19,683.6	-40	NM	NM
BSVE-INLET	08/09/09	7:04	NA	NA	NA	12.1	6.4	1.3	6.6	26	>100	13,310.4	17,879.5	-36	NM	NM
BSVE-INLET	08/10/09	8:17	NA	NA	NA	13.0	6.2	1.1	5.5	22	>100	16,681.9	23,531.9	-42	NM	NM
BSVE-INLET	08/11/09	9:07	NA	NA	NA	11.9	6.3	1	5.5	20	110	13,655.9	17,448.8	-40	NM	NM
BSVE-INLET	08/11/09	11:26	NA	NA	NA	12	6.4	NM	NM	NM	NM	NM	19,388.8	-40	NM	NM
BSVE-INLET	08/11/09	11:28	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	19,388.8	-40	NM	NM
BSVE-INLET	08/12/09	8:13	NA	NA	NA	12	6.1	1.4	5.1	28	>100	11,079.7	14,274.0	-40	NM	NM
BSVE-INLET	08/13/09	11:15	NA	NA	NA	11.4	6.2	1.9	7	38	>100	16,004.9	22,283.5	-38	NM	NM
BSVE-INLET	08/14/09	6:20	NA	NA	NA	11.7	6.2	1.6	6.5	34	>100	15,252.3	20,943.1	-36	NM	NM
BSVE-INLET	08/15/09	6:51	NA	NA	NA	11.8	6.1	1.6	6.8	32	>100	15,158.9	20,289.7	-36	NM	NM
BSVE-INLET	08/16/09	5:53	NA	NA	NA	11.9	6.0	1.4	6.2	28	>100	13,195.6	15,651.8	-36	NM	NM
BSVE-INLET	08/17/09	5:37	NA	NA	NA	12.3	5.8	0.8	6.2	18	>100	9,956.0	15,443.1	-40	NM	NM
BSVE-INLET	08/20/09	8:04	NA	NA	NA	10.5	6.4	1.1	6.3	22	>100	18,631.1	24,927.9	-38	NM	NM
BSVE-INLET	08/21/09	0:42	NA	NA	NA	11.9	6.0	1.0	6.0	20	>100	12,600.0	16,608.3	-38	NM	NM
BSVE-INLET	08/22/09	23:23	NA	NA	NA	10.0	6.4	1.7	8.0	34	>100	17,130.7	24,776.0	-32	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
BSVE Air Treatment System																
BSVE-INLET	08/23/09	0:35	NA	NA	NA	10.8	6.2	1.6	7.3	32	>100	16,601.9	23,265.8	-32	NM	NM
BSVE-INLET	08/24/09	15:39	NA	NA	NA	9.1	6.8	2.2	6.8	44	>100	13,230.8	19,533.9	-37	NM	NM
BSVE-INLET	08/28/09	6:09	NA	NA	NA	8.4	6.8	0.7	7.5	14	>100	16,809.8	22,228.3	-32	NM	NM
BSVE-INLET	08/29/09	0:52	NA	NA	NA	9.6	6.5	1.2	8.9	24	>100	19,910.6	25,890.6	-32	NM	NM
BSVE-INLET	09/03/09	19:37	NA	NA	NA	7.4	7.5	1.7	1.9	35	>100	14,803.0	19,575.0	-25	NM	NM
BSVE-INLET	09/04/09	0:38	NA	NA	NA	8.8	6.8	1.4	9.0	28	>100	16,760.7	21,190.1	-32	NM	NM
BSVE-INLET	09/05/09	1:28	NA	NA	NA	10.8	6.4	1.1	8.3	22	>100	14,046.3	15,043.5	-32	NM	NM
BSVE-INLET	09/06/09	1:10	NA	NA	NA	11.4	6.1	0.8	5.3	16	>100	11,942.4	16,932.5	-32	NM	NM
BSVE-INLET	09/07/09	1:14	NA	NA	NA	11.3	6.3	1.0	7.2	20	>100	10,598.4	13,858.9	-34	NM	NM
BSVE-INLET	09/08/09	1:22	NA	NA	NA	11.8	6.1	0.8	6.1	16	>100	10,746.1	14,334.1	-34	NM	NM
BSVE-INLET	09/09/09	1:31	NA	NA	NA	13.1	5.5	0.5	4.5	10	90	8,561.9	11,814.2	-30	NM	NM
BSVE-INLET	09/10/09	1:02	NA	NA	NA	13.6	5.3	0.8	4.9	16	98	8,997.3	13,446.3	-28	NM	NM
BSVE-INLET	09/11/09	1:10	NA	NA	NA	14.3	4.4	0.3	3.8	6	76	6,959.2	9,914.0	-28	NM	NM
BSVE-INLET	09/12/09	1:08	NA	NA	NA	15.5	3.7	0.5	3.5	10	70	5,431.0	7,885.0	-28	NM	NM
BSVE-INLET	09/13/09	1:33	NA	NA	NA	15.4	4.0	0.5	3.8	11	76	6,387.0	8,952.0	-32	NM	NM
BSVE-INLET	09/13/09	11:35	NA	NA	NA	11.6	5.6	1.4	6.2	29	>100	8,020.8	11,967.2	-32	NM	NM
BSVE-Inlet	09/13/09	11:36	NA	NA	NA	11.3	5.6	0.37	0.49	17	23	8,020.8	11,967.2	-32	NM	NM
BSVE-INLET	09/14/09	1:32	NA	NA	NA	13.1	5.6	0.7	6.1	14	>100	8,275.1	11,469.5	NM	NM	NM
BSVE-INLET	09/15/09	1:36	NA	NA	NA	12.7	5.6	1	7.6	20	>100	8,845.8	13,576.9	-32	NM	NM
BSVE-INLET	09/16/09	1:09	NA	NA	NA	12.8	5.5	0.8	7.3	16	>100	7,298.8	11,499.1	-34	NM	NM
BSVE-INLET	09/17/09	1:52	NA	NA	NA	12.8	5.4	0.8	9.8	16	>100	9,599.2	16,490.1	-34	NM	NM
BSVE-INLET	09/18/09	6:00	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
BSVE-INLET	09/19/09	8:30	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
BSVE-INLET	09/20/09	11:35	NA	NA	NA	10.4	5.6	0.5	10.9	10	>100	8,111.3	16,382.0	-30	NM	NM
BSVE-INLET	09/21/09	0:37	NA	NA	NA	12.1	5.2	0.6	10.1	12	>100	8,103.3	13,885.7	-34	NM	NM
BSVE-INLET	09/22/09	0:51	NA	NA	NA	12.7	5.1	0.9	9.8	18	>100	9,547.8	15,210.3	-34	NM	NM
BSVE-INLET	09/23/09	0:59	NA	NA	NA	12.5	5.0	0.8	9.1	16	>100	7,787.6	12,085.3	-34	NM	NM
BSVE-INLET	09/24/09	1:22	NA	NA	NA	13.1	4.9	0.7	9.0	14	>100	8,247.1	14,618.0	-33	NM	NM
BSVE-INLET	09/25/09	1:13	NA	NA	NA	13.3	4.8	0.8	8.7	16	>100	7,377.6	14,623.0	-32	NM	NM
BSVE-INLET	09/26/09	0:59	NA	NA	NA	13.1	4.7	0.5	8.2	10	>100	6,354.3	11,050.5	-32	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
BSVE Air Treatment System																
BSVE-INLET	09/27/09	0:54	NA	NA	NA	13.3	4.6	0.6	8.2	12	>100	6,326.6	11,100.7	-32	NM	NM
BSVE-INLET	09/28/09	1:21	NA	NA	NA	13.4	4.6	0.5	7.6	10	>100	6,174.5	10,472.4	-34	NM	NM
BSVE-INLET	09/29/09	1:10	NA	NA	NA	13.8	4.5	0.8	7.8	16	>100	6,084.2	11,041.9	-33	NM	NM
BSVE-INLET	09/30/09	1:14	NA	NA	NA	13.4	4.5	0.6	7.5	12	>100	5,877.6	10,298.7	-36	NM	NM
Injection/Extraction Wells																
BV-1N	07/31/09	9:51	NA	NA	NA	19.1	1	0.3	0.4	6	8	1,196.0	1,272.0	0[d]	NM	NM
BV-1N	09/11/09	17:15	55	105	NA	13.3	4.6	0.2	0.5	3	10	341.3	692.4	-14[d]	NM	NM
BV-1N [f]	09/11/09	17:16	55	105	NA	12.6	5	<0.1	<0.1	<1	<1	347.9	705.8	-14[d]	NM	NM
BV-1N	09/17/09	16:27	55	105	NA	11.5	4.8	0.2	0.6	5	12	261.7	392.5	-12[d]	NM	NM
BV-2N	08/05/09	12:21	55	105	NA	12.8	4.3	0.3	14.5	6	>100	168.0	759.3	-8[d]	NM	NM
BV-2N	09/09/09	16:02	55	105	NA	14.2	4.4	0.5	24.2	11	>100	3,813.3	12,942.4	-26[d]	NM	NM
BV-2N	09/17/09	11:01	55	105	NA	13.4	3.7	0.6	24.2	23	>100	2,529.4	7,930.9	-10[d]	NM	NM
BV-3N	09/11/09	7:27	55	105	NA	14.4	6.1	0.2	1.7	3	34	1,353.1	2,163.6	-9[d]	NM	NM
BV-3N	09/12/09	9:46	55	105	NA	14.7	5.3	0.4	1.4	7	28	1,607.2	2,418.0	-8[d]	NM	NM
BV-3N [f]	09/12/09	9:47	55	105	NA	13.9	6	0.024	0.1	<1	0.05	1,146.0	1,724.2	-8[d]	NM	NM
BV-3N	09/25/09	11:00	55	105	NA	16.3	4.2	<0.1	0.6	<1	12	381.7	1,132.0	-16[d]	NM	NM
BV-4N	07/30/09	12:56	NA	NA	NA	3.6	10.8	23.1	75.3	>100	>100	115,091.1	184,544.9	0[d]	NM	NM
BV-4N	09/10/09	15:46	55	105	NA	15.7	4.5	0.6	13.4	13	>100	4,320.0	13,644.0	-64[d]	NM	NM
BV-5	09/17/09	10:46	46	66	NA	0.5	10.7	3.3	10.8	66	>100	44,460.9	53,596.4	-0.15	NM	NM
BV-6N	09/17/09	11:23	55	105	NA	<0.1	13.6	23.8	63.3	>100	>100	61,383.1	131,040.0	-0.11	NM	NM
BV-7N	09/17/09	15:45	55	105	NA	<0.1	12.1	29.5	>100 [e]	>100	>100	26,005.9	67,772.3	0.05	NM	NM
BV-8N	09/17/09	9:42	55	105	NA	0.3	13.6	10.1	29.9	>100	>100	116,497.0	141,458.6	-0.05	NM	NM
BV-9N	07/31/09	7:53	NA	NA	NA	8.2	8.3	2.6	8.6	52	>100	21,771.0	26,505.2	-0.05 [d]	NM	NM
BV-9N	09/11/09	9:53	55	105	NA	17.3	3.3	<0.1	2.0	<1	40	680.5	1,896.0	-19[d]	NM	NM
BV-9N [f]	09/11/09	9:54	55	105	NA	15.9	3.8	<0.1	0.08	<1	0.05	680.5	1,896.0	-19[d]	NM	NM
BV-9N	09/25/09	9:58	55	105	NA	16	3.4	<0.1	1.2	<1	25	409.3	1,786.0	-30[d]	NM	NM
BV-10N	07/31/09	11:11	NA	NA	NA	<0.1	6.2	2.4	13.6	55	>100	17,701.2	22,082.0	0[d]	NM	NM
BV-10N	09/11/09	15:47	55	95	NA	2.6	7.7	1.5	8.4	29	>100	9,178.7	11,920.1	-10[d]	NM	NM
BV-10N [f]	09/11/09	15:48	55	95	NA	1.1	8.4	0.55	0.695	0.5	0.65	8,885.7	11,539.6	-10[d]	NM	NM
BV-11N	08/07/09	10:19	NA	NA	NA	1.3	8.9	1.5	1.6	32	32	17,113.0	18,907.5	-0.2 [d]	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Injection/Extraction Wells																
BV-11N	09/08/09	14:41	55	95	NA	14.4	3.4	<0.1	<0.1	<1	<1	<0.6	<0.6	-20[d]	NM	NM
BV-12N	09/17/09	7:18	55	105	NA	10.3	6.7	0.8	3.6	16	72	7,368.0	8,574.0	-10	NM	NM
BV-13N	07/30/09	13:51	NA	NA	NA	0.7	7.3	<0.1	<0.1	<1	<1	<2.1	<2.1	0[d]	NM	NM
BV-13N	09/11/09	12:34	55	95	NA	15.7	4.2	<0.1	0.4	<1	9	172.0	522.0	-30[d]	NM	NM
BV-13N [f]	09/11/09	12:35	55	95	NA	14.8	4.6	<0.1	<0.1	<1	<1	172.0	522.0	-30[d]	NM	NM
BV-13N	09/25/09	10:32	55	95	NA	15.4	4.1	<0.1	<0.1	<1	3	<0.5	90.7	-26[d]	NM	NM
BV-14N	09/17/09	14:23	55	105	NA	0.6	14.5	19.5	42.7	>100	>100	201,697.4	252,250.1	0.01	NM	NM
BV-15N	08/10/09	14:36	NA	NA	NA	4.4	7.9	<0.1	<0.1	<1	<1	184.3	196.5	-9[d]	NM	NM
BV-15N	09/09/09	12:03	55	85	NA	12.6	5.9	<0.1	0.1	0	2	6.9	16.0	-30[d]	NM	NM
BV-16N	08/21/09	12:11	NA	NA	NA	2.0	10.7	18.8	50.3	>100	>100	30,295.0	55,328.9	NM	NM	NM
BV-16N	09/14/09	10:50	55	105	NA	7.9	7	2.1	18.8	42	>100	21,024.8	29,715.8	-12[d]	NM	NM
BV-16N	09/16/09	13:26	55	105	NA	9.5	6.6	2.2	18.3	44	>100	19,428.9	27,550.0	-17[d]	NM	NM
BV-17N	09/17/09	15:20	55	105	NA	11.5	8.5	<0.1	0.8	<1	16	555.0	1,265.6	-0.3	NM	NM
BV-18N	08/03/09	16:01	NA	NA	NA	2.8	10.8	19.6	50.6	>100	>100	177,395.1	226,619.5	0[d]	NM	NM
BV-18N	09/08/09	17:02	55	105	NA	7.6	9.7	6.0	14.9	100	100	11,975.2	16,033.9	-50[d]	NM	NM
BV-18N	09/17/09	16:03	55	105	NA	10.5	7.3	0.8	13.4	16	>100	9,519.6	15,191.2	-24[d]	NM	NM
BV-19N	07/31/09	10:26	NA	NA	NA	1.1	13	12.3	26.9	>100	>100	42,864.6	43,231.6	0[d]	NM	NM
BV-19N [f]	09/11/09	18:35	55	105	NA	6.7	7.0	1.5	1.8	70	84	21,981.6	29,709.2	-26[d]	NM	NM
BV-19N	09/11/09	18:46	55	105	NA	7.9	6.6	2.5	11.6	50	>100	22,868.2	30,907.5	-26[d]	NM	NM
BV-19N	09/17/09	14:17	55	105	NA	6.6	6.3	2.0	12.2	40	>100	12,652.4	19,308.1	-15[d]	NM	NM
BV-20N	07/31/09	12:56	NA	NA	NA	1.6	12.6	12	24	>100	>100	164,943.9	204,823.8	0[d]	NM	NM
BV-20N	09/09/09	15:07	55	105	NA	5.3	9.2	5.2	11.4	>100	>100	55,765.0	62,741.9	-36[d]	NM	NM
BV-20N	09/17/09	9:53	55	105	NA	5.8	8.8	3.8	10.9	76	>100	26,356.4	37,787.8	-24[d]	NM	NM
BV-21N	09/17/09	8:30	55	105	NA	5	9.7	9.5	>100 [e]	>100	>100	34,252.5	63,137.5	-10	NM	NM
BV-22N	07/30/09	14:41	NA	NA	NA	4.5	7.9	16.2	57.7	>100	>100	73,644.2	123,992.2	0[d]	NM	NM
BV-22N	09/08/09	17:40	55	105	NA	17.8	3.0	1.0	7.4	21	>100	2,131.0	5,896.0	-22[d]	NM	NM
BV-23N	09/14/09	8:33	55	105	NA	20.5	<0.1	<0.1	0.1	<1	2	11.6	17.5	-12[d]	NM	NM
BV-24N	08/12/09	13:23	NA	NA	NA	0.6	9.8	8.3	24	164	478	76,680.4	88,665.0	-4[d]	NM	NM
BV-24N	09/14/09	11:57	55	105	NA	9.8	7	0.5	6.7	10	>100	4,424.1	7,431.7	-12[d]	NM	NM
BV-24N	09/16/09	14:20	55	105	NA	11.2	6.4	0.7	6.9	14	>100	2,720.0	5,439.9	-10[d]	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Injection/Extraction Wells																
BV-25N	08/17/09	16:30	NA	NA	NA	1.7	11.2	4.2	20.1	84	>100	40,559.0	51,448.2	0.05[d]	NM	NM
BV-25N	09/14/09	11:31	55	105	NA	9.8	6.1	1.4	13.4	28	>100	16,247.6	23,434.9	-12[d]	NM	NM
BV-25N	09/16/09	11:15	55	105	NA	10.9	5.6	1.6	13.7	32	>100	13,842.6	19,761.7	-12[d]	NM	NM
PL-101A	09/17/09	8:18	35	75	NA	6.4	10.7	<0.1	<0.1	<1	<1	700.0	760.2	-0.1	NM	NM
PL-101A	09/21/09	12:31	35	75	NA	4.0	10.0	1.7	5.9	34	>100	33,387.3	57,752.5	-6[d]	NM	NM
ASE-20A	09/15/09	9:50	61	81	NA	5.5	6.9	0.3	5.2	7	>100	7,190.6	8,866.8	0.07	NM	NM
ASE-20A	09/16/09	10:07	61	81	NA	0.8	9.0	3.8	90.2	76	>100	44,238.8	63,616.5	-12[d]	NM	NM
ASE-39A	09/16/09	7:54	55	105	NA	<0.1	9.9	28.0	>100 [e]	>100	>100	51,598.3	77,110.6	-0.05	NM	NM
ASE-39A	09/23/09	13:06	55	105	NA	0.4	8.8	25.6	>100 [e]	>100	>100	824,806.1	852,800.0	-8[d]	NM	NM
ASE-41A	08/03/09	14:35	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	NM	0	NM	NM
ASE-41A	08/14/09	14:43	NA	NA	NA	15.3	5.9	1.8	2	38	40	23,379.0	25,374.0	-20[d]	NM	NM
ASE-41A	09/08/09	16:02	60	90	NA	14.3	5.4	1.8	3.8	37	77	11,754.0	16,879.5	-22[d]	NM	NM
ASE-41A	09/17/09	13:59	60	90	NA	15.6	4.2	0.2	2.5	4.0	50	7,081.0	9,651.0	-12[d]	NM	NM
ASE-46A	07/31/09	9:01	NA	NA	NA	2.4	12.3	15.3	33.4	>100	>100	60,005.0	61,760.0	0[d]	NM	NM
ASE-46A	09/11/09	10:44	54.7	79.7	NA	16.6	2.1	0.1	1.3	2	27	305.0	958.2	-10[d]	NM	NM
ASE-46A [f]	09/11/09	10:56	54.7	79.7	NA	17.9	2.6	<0.1	<0.1	<1	<1	NM	NM	-10[d]	NM	NM
ASE-46A	09/11/09	10:56	54.7	79.7	NA	NM	NM	NM	NM	NM	NM	305.0	958.2	-10[d]	NM	NM
ASE-46A	09/25/09	11:33	54.7	79.7	NA	17.5	1.8	<0.1	0.3	<1	7	<0.5	317.2	-10[d]	NM	NM
ASE-51A	09/16/09	9:24	55.6	80.6	NA	<0.1	10.6	55.4	>100 [e]	>100	>100	38,566.0	41,998.0	0.06	NM	NM
ASE-53A	09/16/09	11:23	53.8	78.8	NA	<0.1	12.7	6.7	43.2	>100	>100	9,065.0	10,788.0	0.01	NM	NM
ASE-56A	07/17/09	7:12	55.4	80.4	NA	<0.1	10.8	>100	>100 [e]	>100	>100	403,357.2	446,078.6	0	NM	NM
ASE-56A	09/10/09	9:28	55.4	80.4	NA	4.0	9.6	3.6	62.5	76	>100	40,065.7	61,017.5	-40[d]	NM	NM
ASE-56A	09/16/09	17:09	55.4	80.4	NA	9.5	7.5	0.6	28.1	12	>100	4,609.0	5,853.0	0.07[d]	NM	NM
ASE-57A	09/16/09	13:56	55.1	80.1	NA	<0.1	14.4	46.6	>100 [e]	>100	>100	21,010.0	23,124.0	-0.17	NM	NM
ASE-59A	09/16/09	15:27	61	91	NA	<0.1	12.6	6.7	22.7	>100	>100	5,621.0	16,690.0	-0.04	NM	NM
ASE-66A	09/17/09	10:02	60.5	90.5	NA	15.5	0.5	<0.1	0.2	<1	4	1,277.0	1,830.0	-0.19	NM	NM
Process Monitoring Wells																
PMW-1-U	08/26/09	11:00	5	10	--- [a]	18.6	2.3	<0.1	<0.1	<1	<1	2.8	3.6	-0.05	49.4	NM
PMW-1-U	09/03/09	6:42	5	10	--- [a]	18.4	2.7	<0.1	<0.1	<1	<1	<0.5	<0.5	0	64	NM
PMW-1-U	09/10/09	10:13	5	10	--- [a]	18.9	2.4	<0.1	<0.1	<1	2	11.6	11.8	0	62.9	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Process Monitoring Wells																
PMW-1-M	08/26/09	11:19	20	25	--- [a]	18.8	1.7	<0.1	<0.1	<1	<1	5.2	5.6	-0.05	46.9	26.2
PMW-1-M	09/03/09	6:59	20	25	--- [a]	18.1	2.2	<0.1	<0.1	<1	<1	<0.5	<0.5	0	73.2	25.3
PMW-1-M	09/10/09	10:32	20	25	--- [a]	18.8	2.3	<0.1	<0.1	<1	<1	<0.5	<0.5	0	79.2	28.3
PMW-1-ML	08/26/09	12:01	55	67.05	67.05	2.5	8.1	6.4	2.9	>100	>100	77,256.1	119,623.9	-0.1	46.3	26.4
PMW-1-ML	09/04/09	12:05	55	67.11	67.11	1.2	9.1	5.4	30.9	>100	>100	26,586.2	35,713.9	0	40.9	26.9
PMW-1-ML	09/10/09	11:09	55	67.21	67.21	5.2	7.6	3.3	18.6	6	>100	27,742.6	39,835.2	-0.27	79.9	26.5
PMW-1-ML	09/15/09	8:46	55	67.27	67.27	0.3	7.8	3.3	33	66	>100	31,129.4	39,542.6	-0.75	79.2	26.2
PMW-1-ML	09/24/09	14:08	55	67.28	67.28	11.1	2.4	0.8	1.2	17	24	12,633.4	12,958.4	-0.55	81.9	26.3
PMW-1-ML	09/29/09	9:42	55	67.37	67.37	3.9	8.5	2.9	16.1	59	>100	18,969.7	27,153.1	-0.55	64.5	26.1
PMW-2-U	08/26/09	13:03	5	10	--- [a]	18.2	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.05	48.5	NM
PMW-2-U	09/03/09	5:52	5	10	--- [a]	18.7	2.6	<0.1	<0.1	<1	<1	0.9	0.9	0	59.3	NM
PMW-2-U	09/10/09	10:30	5	10	--- [a]	18.4	2.5	<0.1	<0.1	<1	<1	<0.5	<0.5	0	71	NM
PMW-2-M	08/26/09	13:19	20	25	--- [a]	19	1.1	<0.1	0.1	<1	2	<0.5	<0.5	-0.06	49.4	28.2
PMW-2-M	09/03/09	6:10	20	25	--- [a]	19.8	1.6	<0.1	<0.1	<1	<1	3.3	3.3	0	82.1	24.5
PMW-2-M	09/10/09	8:43	20	25	--- [a]	18.8	1.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	72.5	28
PMW-2-ML	08/26/09	13:44	55	67.15	67.15	1.6	10.6	1	20.4	20	>100	7,584.2	13,860.3	-0.1	45.7	26.1
PMW-2-ML	09/04/09	12:46	55	67.25	67.25	0.5	11.4	0.9	20	19	>100	9,060.0	15,184.0	0	52.1	26.7
PMW-2-ML	09/10/09	9:14	55	67.34	67.34	2.2	10.8	0.9	14.5	18	>100	3,767.2	7,242.0	-0.2	83.2	26.8
PMW-2-ML	09/14/09	14:43	55	67.33	67.33	1	10.4	1	20.9	20	>100	7,338.1	13,318.8	-0.25	70.1	25.4
PMW-2-ML	09/25/09	9:03	55	67.47	67.47	4.5	9.1	2	11.4	40	>100	9,822.7	16,164.1	0.55	70.6	25.7
PMW-2-ML	09/29/09	8:47	55	67.48	67.48	4.3	9.8	2	13.4	40	>100	9,308.5	15,416.1	-0.25	88.5	26
PMW-3-U	09/03/09	11:13	5	10	--- [a]	11.3	8.5	<0.1	<0.1	<1	<1	0.9	0.9	0	74.3	NM
PMW-3-U	09/30/09	11:58	5	10	--- [a]	17.7	4	<0.1	<0.1	<1	<1	9.8	10.8	-0.05	61.5	NM
PMW-3-M	09/03/09	11:38	20	25	--- [a]	12	8.3	<0.1	<0.1	<1	<1	0.9	0.9	0	85.1	28.5
PMW-3-M	09/30/09	12:12	20	25	--- [a]	18.9	2.3	<0.1	<0.1	<1	<1	16.2	16.2	-0.08	68.7	29.1
PMW-3-ML	09/03/09	12:17	55	67.02	67.02	<0.1	10.4	17.7	>100 [e]	>100	>100	102,394.2	154,760.3	0	75.5	26.8
PMW-3-ML	09/30/09	11:24	55	67.29	67.29	14.5	7.6	0.7	75.7	15	>100	3,274.0	39,665.8	-0.5	76.8	26.8
PMW-4-U	09/04/09	15:43	5	10	--- [a]	12.7	6.9	<0.1	<0.1	<1	<1	<0.9	<0.9	0	64.1	NM
PMW-4-U	09/24/09	12:43	5	10	--- [a]	15.2	5.4	<0.1	<0.1	<1	<1	15.3	17.5	-0.01	73.9	NM
PMW-4-U	09/30/09	15:23	5	10	--- [a]	15.9	4.7	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.04	52.6	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Process Monitoring Wells																
PMW-4-M	09/04/09	16:21	20	25	--- [a]	8.3	9.5	<0.1	<0.1	<1	<1	<1.1	<1.1	0	75.7	28.7
PMW-4-M	09/24/09	12:59	20	25	--- [a]	13.6	6.7	<0.1	<0.1	<1	<1	11.9	16.9	-0.01	81.7	27.8
PMW-4-M	09/30/09	15:38	20	25	--- [a]	15	5.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.02	51.1	28.1
PMW-4-ML	09/15/09	11:32	55	63.52	63.52	0.3	12.8	4.2	33.9	84	>100	43,312.6	55,378.9	0.05	77.2	26.5
PMW-4-ML	09/24/09	13:18	55	63.58	63.58	<0.1	13.5	5.6	26.5	>100	>100	36,634.5	50,320.9	0	89.7	26.7
PMW-4-ML	09/30/09	16:03	55	63.66	63.66	<0.1	13.4	2.4	21.8	48	>100	18,664.3	26,932.3	-0.06	53.7	26.8
PMW-5-U	09/05/09	9:43	5	10	--- [a]	4.5	12.9	<0.1	<0.1	<1	<1	1.4	1.4	0	81.2	NM
PMW-5-U	09/24/09	10:01	5	10	--- [a]	8.4	10.7	<0.1	<0.1	<1	<1	1.3	11.9	-0.04	92.8	NM
PMW-5-U	09/29/09	13:36	5	10	--- [a]	8.7	9.3	<0.1	<0.1	<1	<1	<1.1	<1.1	-0.03	80.9	NM
PMW-5-M	09/05/09	10:04	20	25	--- [a]	3.8	13.1	<0.1	<0.1	<1	<1	<1.6	<1.6	0	89.7	28.6
PMW-5-M	09/24/09	10:23	20	25	--- [a]	9.5	9.6	<0.1	<0.1	<1	<1	<1.0	17.4	-0.04	71.3	29.4
PMW-5-M	09/29/09	13:53	20	25	--- [a]	10.4	7.5	<0.1	<0.1	<1	<1	<0.9	<0.9	-0.03	57.7	29.7
PMW-5-ML	09/15/09	10:26	55	64.68	64.68	1.9	8.1	37.8	>100 [e]	>100	>100	742,710.0	819,850.0	0.1	70	26.7
PMW-5-ML	09/24/09	11:11	55	64.78	64.78	8.7	1.8	19.4	>100 [e]	>100	>100	170,583.1	197,172.3	-0.05	89.2	27
PMW-5-ML	09/29/09	15:24	55	64.77	64.77	<0.1	8.3	36.4	100	>100	>100	184,220.7	232,813.2	-0.08	42.4	27.2
PMW-6-U	08/07/09	11:29	5	10	--- [a]	12.7	10.6	<0.1	<0.1	<1	<1	22.1	28.5	-0.05	73	NM
PMW-6-U	08/12/09	14:42	5	10	--- [a]	15.7	8.3	<0.1	<0.1	<1	<1	11.0	11.3	0	48.3	NM
PMW-6-U	08/19/09	8:25	5	10	--- [a]	17.2	6.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	77.8	NM
PMW-6-U	08/25/09	14:54	5	10	--- [a]	17.5	6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	63.3	NM
PMW-6-U	09/02/09	13:20	5	10	--- [a]	15.7	6.1	<0.1	<0.1	<1	<1	4.2	4.3	0	68.1	NM
PMW-6-U	09/09/09	9:44	5	10	--- [a]	18	4.8	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.02	62.5	NM
PMW-6-M	08/07/09	11:47	20	25	--- [a]	10.7	11.7	<0.1	<0.1	<1	<1	32.2	36.0	-0.1	53	28.8
PMW-6-M	08/12/09	15:00	20	25	--- [a]	15.1	8.2	<0.1	<0.1	<1	<1	7.5	7.6	0	35.9	29
PMW-6-M	08/19/09	8:46	20	25	--- [a]	6.6	6.7	<0.1	<0.1	<1	<1	<0.5	<0.5	0	73	29
PMW-6-M	08/25/09	15:15	20	25	--- [a]	16.6	6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	48.3	28.5
PMW-6-M	09/02/09	13:50	20	25	--- [a]	15.3	6.9	<0.1	<0.1	<1	<1	8.1	8.4	0	70.5	29.3
PMW-6-M	09/09/09	10:03	20	25	--- [a]	17.6	5.1	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.04	60.7	29.6
PMW-6-ML	08/07/09	12:15	55	66.44	66.44	9.7	7.4	21.7	67	>100	>100	37,831.4	63,831.8	-0.15	45.9	27.2
PMW-6-ML	08/12/09	15:49	55	66.14	66.14	12.8	3.4	6.6	24.6	>100	>100	15,177.1	21,617.7	-0.15	52.1	27.2
PMW-6-ML	08/19/09	9:08	55	66.58	66.58	2.1	<0.1	42.4	99.9	>100	>100	478,483.5	503,041.0	0.05	60.2	27.1

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Process Monitoring Wells																
PMW-6-ML	08/25/09	15:46	55	66.57	66.57	1	<0.1	37.2	99.9	>100	>100	535,359.8	583,434.8	0.2	47.5	26.3
PMW-6-ML	09/02/09	14:20	55	66.5	66.5	<0.1	16.4	43.3	>100 [e]	>100	>100	420,680.0	436,529.6	0.25	72.6	27.2
PMW-6-ML	09/09/09	10:26	55	66.83	66.83	<0.1	16.5	38.3	>100 [e]	>100	>100	547,317.3	729,594.7	-0.14	60.1	27.1
PMW-6-ML	09/14/09	15:35	55	66.85	66.85	0.5	<0.1	29.5	>100 [e]	>100	>100	431,868.0	505,337.1	-0.25	77.5	25.3
PMW-6-ML	09/24/09	8:52	55	67.03	67.03	1.9	14.4	21.2	>100 [e]	>100	>100	198,939.0	218,907.1	-0.25	76.6	26.9
PMW-6-ML	09/29/09	10:34	55	67.08	67.08	<0.1	15.2	19.5	>100 [e]	>100	>100	101,282.6	116,292.1	-0.23	56.2	26.7
PMW-7-U	08/13/09	6:20	5	10	--- [a]	16.5	6.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0.05	NM	NM
PMW-7-U	08/19/09	10:20	5	10	--- [a]	17.3	5	<0.1	<0.1	<1	<1	<0.5	<0.5	0	85.8	NM
PMW-7-U	08/25/09	16:33	5	10	--- [a]	17.2	4.4	<0.1	<0.1	<1	<1	<0.5	<0.5	0	68	NM
PMW-7-U	09/03/09	7:22	5	10	--- [a]	16.1	5.3	<0.1	<0.1	<1	<1	<0.5	<0.5	0	42.3	NM
PMW-7-U	09/09/09	13:02	5	10	--- [a]	17.1	4.2	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.01	56.9	NM
PMW-7-M	08/13/09	6:38	20	25	--- [a]	13.9	6.7	<0.1	<0.1	<1	<1	<0.7	<0.7	0	NM	29.5
PMW-7-M	08/19/09	10:38	20	25	--- [a]	15.5	6.1	<0.1	<0.1	<1	<1	8.9	10.3	0	70.5	29.6
PMW-7-M	08/25/09	16:53	20	25	--- [a]	16.1	5.3	<0.1	<0.1	<1	<1	<0.5	<0.5	0	46.7	29.8
PMW-7-M	09/03/09	7:37	20	25	--- [a]	14.6	6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	67.5	25.6
PMW-7-M	09/09/09	13:18	20	25	--- [a]	16.8	5.1	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.01	70.1	30.5
PMW-7-ML	08/13/09	6:53	55	64.13	64.13	19.7	0.4	<0.1	<0.1	<1	<1	265.7	275.2	-0.1	NM	27.4
PMW-7-ML	08/19/09	10:50	55	64.17	64.17	2.4	9.2	0.2	0.4	4	8	8,490.9	8,806.6	0.025	82.1	27.5
PMW-7-ML	08/25/09	17:25	55	64.52	64.52	18.1	0.1	<0.1	<0.1	<1	<1	1,189.0	1,259.0	0	52.4	27.6
PMW-7-ML	09/04/09	13:37	55	64.42	64.42	4.7	4.9	<0.1	0.4	<1	9	841.5	996.8	-0.1	68.4	26.7
PMW-7-ML	09/09/09	13:47	55	64.43	64.43	3.1	8.6	0.2	0.4	4	8	2,739.6	3,068.0	-0.1	73.5	27.9
PMW-7-ML	09/15/09	7:38	55	64.62	64.62	5.3	8.6	<0.1	0.2	<1	4	685.0	780.0	-0.25	78.4	27.3
PMW-7-ML	09/24/09	14:52	55	64.66	64.66	6.4	7.5	<0.1	0.2	<1	4	672.1	804.4	-0.22	76.6	26.8
PMW-7-ML	09/29/09	11:28	55	64.75	64.75	7.7	8	<0.1	0.2	<1	4	18.3	80.6	-0.24	78.3	28.6
PMW-8-U	07/09/09	15:38	5	10	--- [a]	17.8	1.8	<0.1	<0.1	<1	<1	<0.5	<0.5	0	45.2	NM
PMW-8-U	07/16/09	8:35	5	10	--- [a]	17.4	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	44.3	NM
PMW-8-U	07/23/09	13:45	5	10	--- [a]	17.5	1.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	44.8	NM
PMW-8-U	07/29/09	12:16	5	10	--- [a]	16.2	1.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	37.6	NM
PMW-8-U	08/06/09	15:35	5	10	--- [a]	19.9	<0.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0	40.9	NM
PMW-8-U	08/13/09	7:16	5	10	--- [a]	20.7	<0.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Process Monitoring Wells																
PMW-8-U	08/19/09	11:33	5	10	--- [a]	20.2	<0.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0	71	NM
PMW-8-U	09/04/09	14:21	5	10	--- [a]	19.9	2.3	<0.1	<0.1	<1	<1	<0.5	<0.5	0	57.3	NM
PMW-8-M	07/09/09	15:42	20	25	--- [a]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
PMW-8-M	07/16/09	8:46	20	25	--- [a]	18.8	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	28.7
PMW-8-M	07/23/09	14:04	20	25	--- [a]	15.3	6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	46.2	NM
PMW-8-M	07/29/09	12:36	20	25	--- [a]	14.5	7.2	<0.1	<0.1	<1	<1	<0.6	<0.6	0	49.8	24
PMW-8-M	08/06/09	15:52	20	25	--- [a]	20.2	1.3	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.15	38.6	29.9
PMW-8-M	08/13/09	7:28	20	25	--- [a]	20.5	0.5	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.15	NM	29.4
PMW-8-M	08/19/09	11:55	20	25	--- [a]	20.5	0.6	<0.1	<0.1	<1	<1	1.5	1.7	0.05	88.9	29.8
PMW-8-M	09/04/09	14:40	20	25	--- [a]	20.1	0.4	<0.1	<0.1	<1	<1	<0.5	<0.5	0	59.1	29.2
PMW-8-ML	07/09/09	16:01	55	66.48	66.48	1.4	11	6.2	15	>100	>100	42,260.0	46,170.0	0	56.6	27.8
PMW-8-ML	07/16/09	9:11	55	66.52	66.52	1.3	10.9	5.8	14.7	>100	>100	45,699.8	49,799.9	0	52.2	27.8
PMW-8-ML	07/23/09	14:27	55	67.05	67.05	1.4	11.4	7.1	15.4	>100	>100	42,700.2	49,087.7	0	49.7	NM
PMW-8-ML	07/29/09	13:01	55	66.91	66.91	6.4	7	3.2	9	69	>100	27,336.6	43,007.5	0	45.4	26.2
PMW-8-ML	08/06/09	16:28	55	67.23	67.23	11.5	8	1.8	3.5	34	70	22,282.5	25,189.8	-1	52.5	27.5
PMW-8-ML	08/13/09	7:50	55	67.35	67.35	13.9	7.6	1.2	2.3	24	46	13,712.7	15,802.5	-19.95	NM	27.2
PMW-8-ML	08/19/09	12:11	55	67.51	67.51	12.4	6.7	0.1	1.9	14	38	12,713.1	15,032.2	0.05	46.9	27.5
PMW-8-ML	09/04/09	13:02	55	67.63	67.63	16.8	4.3	0.5	1.2	10	25	6,046.0	9,034.0	-2	75.9	26.9
PMW-9-U	07/09/09	11:12	5	10	--- [a]	15.3	6.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0	55.1	NM
PMW-9-U	07/16/09	12:17	5	10	--- [a]	14.7	6.2	<0.1	<0.1	<1	<1	<0.7	<0.7	0	59.6	NM
PMW-9-U	07/23/09	10:17	5	10	--- [a]	15.6	5.8	<0.1	<0.1	<1	<1	<0.5	<0.5	0	58.2	NM
PMW-9-U	07/29/09	13:34	5	10	--- [a]	15	6.3	<0.1	<0.1	<1	<1	<0.5	<0.5	0	48.1	NM
PMW-9-U	08/06/09	12:41	5	10	--- [a]	18.5	2.6	<0.1	<0.1	<1	<1	<0.5	<0.5	0	62.4	NM
PMW-9-U	08/13/09	8:22	10	15	--- [a]	19.4	2.2	<0.1	<0.1	<1	<1	3.8	3.9	-0.15	NM	NM
PMW-9-U	08/19/09	14:48	5	10	--- [a]	18.1	1.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	75.7	NM
PMW-9-U	09/14/09	8:50	5	10	--- [a]	19.0	1.2	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.09	NM	NM
PMW-9-U [f]	09/14/09	8:51	5	10	--- [a]	18.9	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.09	NM	NM
PMW-9-M	07/09/09	11:35	20	25	--- [a]	13.6	4.7	<0.1	<0.1	<1	<1	<0.7	<0.7	0	23.9	29.4
PMW-9-M	07/16/09	12:36	20	25	--- [a]	12.4	5.1	<0.1	<0.1	<1	<1	<0.8	<0.8	0	NM	28.5
PMW-9-M	07/23/09	10:42	20	25	--- [a]	14.1	5	<0.1	<0.1	<1	<1	<0.7	<0.7	0	27.3	32.6

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Process Monitoring Wells																
PMW-9-M	07/29/09	13:51	20	25	--- [a]	14.7	4.6	<0.1	<0.1	<1	<1	<0.6	<0.6	0	27	30.2
PMW-9-M	08/06/09	13:05	20	25	--- [a]	19.7	1.4	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.2	30.2	30.1
PMW-9-M	08/13/09	8:35	20	25	--- [a]	20	0.9	<0.1	<0.1	<1	<1	2.7	4.1	-0.25	NM	29.5
PMW-9-M	08/19/09	15:00	20	25	--- [a]	18.6	1.4	<0.1	<0.1	<1	<1	<0.5	<0.5	0.1	79.5	30.5
PMW-9-M	09/14/09	9:21	20	25	--- [a]	19.6	0.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.15	NM	NM
PMW-9-M [f]	09/14/09	9:22	20	25	--- [a]	19.8	1	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.15	NM	NM
PMW-9-ML	07/09/09	11:54	55	69.89	69.89	0.4	8.8	3.1	20.2	62	>100	7,790.0	9,965.3	0	33.7	28.3
PMW-9-ML	07/16/09	12:51	55	69.74	69.74	0.3	9.2	3.4	21.2	68	>100	11,717.5	13,919.7	0	NM	27.4
PMW-9-ML	07/23/09	11:17	55	69.78	69.78	0.1	9.1	2.9	24.1	62	>100	11,253.3	13,472.0	0	35.2	28.4
PMW-9-ML	07/29/09	14:16	55	69.21	69.21	0.2	9	2.4	19.6	57	>100	11,032.5	13,980.9	0	35.2	29.8
PMW-9-ML	08/06/09	13:35	55	70.3	70.3	4.2	7.9	0.5	10.9	10	>100	2,104.5	5,337.6	-0.55	15.3	27.6
PMW-9-ML	08/13/09	8:50	55	70.38	70.38	9.5	5.4	0.4	5.9	8	>100	1,358.7	5,553.2	-0.65	NM	27.2
PMW-9-ML	08/19/09	15:22	55	70.46	70.46	1.2	8.9	0.2	10.9	4	>100	1,877.3	6,181.7	0.15	78.9	27.8
PMW-9-ML	08/28/09	13:38	55	71.5	71.5	17.6	1.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0.23	NM	27.9
PMW-9-ML	09/04/09	17:06	55	70.72	70.72	9.1	5.3	1.2	5.9	25	>100	6,234.9	17,007.9	-0.1	82	27.7
PMW-9-ML	09/10/09	13:58	55	69.39	69.39	5.1	8.6	0.6	11	13	>100	829.0	2,596.5	-0.4	83.1	27.3
PMW-9-ML	09/16/09	14:24	55	70.82	70.82	5.9	8.4	0.3	11.8	6	>100	1,731.0	6,032.7	0.5	32.8	28
PMW-9-ML	09/23/09	14:39	55	70.96	70.96	4.2	9.7	1.8	7.8	37	>100	1,455.2	4,660.8	-0.41	12.8	26.7
PMW-9-ML	09/30/09	10:06	55	71.3	71.3	5.4	10.2	1.1	9.2	22	>100	1,519.8	5,735.0	-0.6	60.9	27.8
PMW-10-U	07/09/09	14:36	5	10	--- [a]	12.0	4.8	<0.1	<0.1	<1	<1	<0.9	<0.9	0	47.2	30.2
PMW-10-U	07/16/09	13:19	5	10	--- [a]	12.5	4.6	<0.1	<0.1	<1	<1	<0.9	<0.9	0	NM	NM
PMW-10-U	07/23/09	11:56	5	10	--- [a]	12.1	4.8	<0.1	<0.1	<1	<1	<1.0	<1.0	0	47.8	NM
PMW-10-U	07/29/09	14:43	5	10	--- [a]	12.3	4.5	<0.1	<0.1	<1	<1	<1.0	<1.0	0	42.2	NM
PMW-10-U	08/06/09	14:08	5	10	--- [a]	15.4	3.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	64.4	NM
PMW-10-U	08/13/09	13:53	5	10	--- [a]	16.6	4.2	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
PMW-10-U	08/20/09	9:44	5	10	--- [a]	17	3.7	<0.1	<0.1	<1	<1	3.0	3.6	0	73.9	NM
PMW-10-U	09/03/09	9:50	5	10	--- [a]	15.6	3.8	<0.1	<0.1	<1	<1	<0.5	<0.5	0	59.9	NM
PMW-10-M	07/09/09	14:52	20	25	--- [a]	9.9	5.8	<0.1	<0.1	<1	<1	<1.0	<1.0	0	29.6	30.2
PMW-10-M	07/16/09	13:34	20	25	--- [a]	10.8	5.3	<0.1	<0.1	<1	<1	<1.0	<1.0	0	NM	29.8
PMW-10-M	07/23/09	12:13	20	25	--- [a]	10.1	5.6	<0.1	<0.1	<1	<1	<1.0	<1.0	0	53.1	31.4

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Process Monitoring Wells																
PMW-10-M	07/29/09	14:59	20	25	--- [a]	9.5	6.0	<0.1	<0.1	<1	<1	<1.2	<1.2	0	49.6	36.4
PMW-10-M	08/06/09	14:30	20	25	--- [a]	12.4	5.2	<0.1	<0.1	<1	<1	<0.5	<0.5	0	38.6	30.4
PMW-10-M	08/13/09	14:08	20	25	--- [a]	14.1	5.1	<0.1	<0.1	<1	<1	4.0	7.3	0	NM	29.8
PMW-10-M	08/20/09	10:00	20	25	--- [a]	15.3	4.2	<0.1	<0.1	<1	<1	10.7	13.9	-0.1	71.6	29.6
PMW-10-M	09/03/09	10:13	20	25	--- [a]	14.2	4.3	<0.1	<0.1	<1	<1	0.7	0.7	0	80.7	27.8
PMW-10-L	07/09/09	15:13	55	76.91	76.91	2	7.5	<0.1	<0.1	<1	<1	<1.9	<1.9	0	37.2	27.3
PMW-10-L	07/16/09	13:53	55	76.82	76.82	2.5	6.7	<0.1	<0.1	<1	<1	<1.9	<1.9	0	NM	27.5
PMW-10-L	07/23/09	12:41	55	76.41	76.41	1.7	6.9	<0.1	<0.1	<1	<1	<2.2	<2.2	0	52.4	26.2
PMW-10-L	07/29/09	15:26	55	76.23	76.23	1.5	7.2	<0.1	<0.1	<1	<1	<2.3	<2.3	0	49.2	27.1
PMW-10-L	08/06/09	14:56	55	76.95	76.95	5.2	6.4	<0.1	<0.1	<1	<1	<0.5	<0.5	0	42.6	27.6
PMW-10-L	08/13/09	14:23	55	77.05	77.05	3.9	6.6	<0.1	<0.1	<1	<1	<1.5	<1.5	0	NM	26.8
PMW-10-L	08/20/09	10:14	55	77.2	77.2	4.4	6.3	<0.1	<0.1	<1	<1	12.8	15.4	-0.15	59	26.8
PMW-10-L	08/28/09	12:45	55	80	NA	3.6	6.5	<0.1	<0.1	<1	<1	60.2	419.3	0.24	NM	27.2
PMW-10-L	09/04/09	18:38	55	77.49	77.49	4.2	5.9	<0.1	0.1	<1	3	<1.5	<1.5	-0.15	73.8	24.9
PMW-10-L	09/10/09	13:26	55	77.59	77.59	5.3	5.8	<0.1	<0.1	<1	<1	<1.4	<1.4	0	68.8	27.2
PMW-10-L	09/15/09	9:37	55	77.71	77.71	4.7	6.1	<0.1	<0.1	<1	<1	48.3	49.5	-0.1	71.2	21.2
PMW-10-L	09/23/09	15:31	55	77.82	77.82	3.7	6.3	0.1	0.2	3	5	15.9	43.8	-0.04	24.2	27.2
PMW-10-L	09/30/09	9:16	55	77.9	77.9	4.2	6.8	<0.1	<0.1	<1	<1	<1.4	4.3	-0.22	61.1	26.9
Sentinel Wells																
BC-7A	09/14/09	14:18	39	64.03	64.03	10.8	5.2	<0.1	<0.1	<1	<1	<0.9	<0.9	-0.11	NM	NM
BC-18	09/02/09	5:20	60	80	NA	17	0.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
PL-102A	09/13/09	10:32	37	64.35	64.35	6.7	6.8	<0.1	<0.1	<1	<1	218.7	218.7	0.05	NM	NM
PL-2102	09/13/09	8:59	35	66.46	66.46	3.6	8.4	0.8	4.7	16	95	6,699.3	7,904.3	-11	NM	NM
ASE-54A	09/15/09	8:12	55.5	66.82	66.82	<0.1	8.5	0.2	3.7	4	75	4,706.4	5,552.5	0.08	NM	NM
ASE-60A	09/14/09	11:18	61	63.71	63.71	<0.1	6.5	2.9	13.9	59	>100	18,417.8	21,686.9	0.06	NM	NM
ASE-61A	09/14/09	15:30	60.5	63.3	63.3	6.5	6.8	<0.1	<0.1	<1	<1	<1.4	<1.4	-0.04	NM	NM
ASE-122A	09/03/09	10:43	63	71.02	71.02	19.4	0.5	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
ASE-123A	09/03/09	10:08	62	69.38	69.38	17.1	0.8	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
ASE-124A	09/03/09	5:45	69	77.52	77.52	8.8	5	<0.1	<0.1	<1	<1	<1.3	<1.3	0	NM	NM
ASE-125A	09/02/09	5:50	69	77.77	NA	14.8	2.6	<0.1	<0.1	<1	<1	<0.7	<0.7	0	NM	NM

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Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Sentinel Wells																
ASE-128A	09/02/09	1:05	68	76.07	NA	14.2	4.2	<0.1	<0.1	<1	<1	<0.7	<0.7	0	NM	NM
P-28-U	09/11/09	14:20	6	11	--- [a]	12.8	7.2	<0.1	<0.1	<1	<1	<0.7	<0.7	0.7	NM	NM
P-28-M	09/11/09	14:40	43	48	--- [a]	10.7	5.4	<0.1	<0.1	<1	<1	<0.9	<0.9	0.07	NM	NM
P-28-L	09/11/09	14:57	58	65.59	65.59	6.2	6.8	<0.1	<0.1	<1	<1	<1.3	1.3	-0.15	NM	NM
P-30-U	09/12/09	9:32	6	11	--- [a]	16.8	2.5	<0.1	<0.1	<1	<1	<0.5	<0.5	0.09	NM	NM
P-30-M	09/12/09	9:47	50	55	--- [a]	3.0	7.6	0.3	6.9	7	>100	600.9	3,222.0	-0.21	NM	NM
P-30-L	09/12/09	10:10	60	66.83	66.83	3.3	11.4	0.1	0.1	3	2	140.8	287.4	-0.19	NM	NM
P-46-U	09/12/09	8:05	6	11	--- [a]	20.1	1.0	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.04	NM	NM
P-46-M	09/12/09	8:22	45	50	--- [a]	17.4	4.4	<0.1	<0.1	<1	<1	<0.5	<0.5	-12	NM	NM
P-46-L	09/12/09	8:43	57	68.81	68.81	3.8	8.6	<0.1	<0.1	<1	<1	<1.6	<1.6	0.07	NM	NM
P-47	09/12/09	10:48	6	11	--- [a]	18.3	2.5	<0.1	<0.1	<1	<1	17.2	17.2	-0.02	NM	NM
SMW-1-U	09/07/09	10:48	5	9	--- [a]	19.1	1.4	<0.1	<0.1	<1	<1	4.5	6.0	0	NM	NM
SMW-1-M	09/07/09	11:10	20	25	--- [a]	18.2	2.2	<0.1	<0.1	<1	<1	2.7	2.8	0	NM	NM
SMW-1-L	09/07/09	11:46	55	65.05	65.05	1.8	10.6	1.1	1.2	22	24	2,321.5	3,316.7	0	NM	NM
SMW-2-M	09/13/09	9:20	20	25	--- [a]	17.7	3.1	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
SMW-2-M [f]	09/13/09	9:21	20	25	--- [a]	17.6	3.2	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
SMW-3-U	09/07/09	12:32	5	9	--- [a]	20.3	0.5	<0.1	<0.1	<1	<1	14.1	16.6	0.0	NM	NM
SMW-3-M	09/07/09	12:49	20	25	--- [a]	19.8	0.5	<0.1	<0.1	<1	<1	18.1	19.0	0	NM	NM
SMW-3-L	09/07/09	13:02	55	64.33	64.33	4.6	6.1	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.05	NM	NM
SMW-4-U	09/12/09	11:08	5	9	--- [a]	12.8	5.6	<0.1	<0.1	<1	<1	194.4	249.2	0	NM	NM
SMW-4-U [f]	09/12/09	11:09	5	9	--- [a]	10.9	6	<0.1	<0.1	<1	<1	151.1	193.7	0	NM	NM
SMW-4-M	09/12/09	11:50	20	25	--- [a]	13.4	4.7	<0.1	<0.1	<1	<1	127.5	424.3	0	NM	NM
SMW-4-M [f]	09/12/09	11:51	20	25	--- [a]	11.6	5	<0.1	<0.1	<1	<1	127.3	423.5	0	NM	NM
SMW-4-L	09/12/09	12:30	55	95	NA	<0.1	7.2	2.3	2.8	47	57	29,471.0	31,856.5	-0.1	NM	NM
SMW-4-L [f]	09/12/09	12:31	55	95	NA	<0.1	7.4	<0.1	<0.1	<1	<1	17,793.8	19,234.1	-0.1	NM	NM
SMW-5-U	09/11/09	12:10	5	9	--- [a]	18.4	1.5	<0.1	<0.1	<1	<1	10.1	13.6	0	NM	NM
SMW-5-M	09/11/09	12:32	20	25	--- [a]	17.8	2.1	<0.1	<0.1	<1	<1	5.0	9.0	0	NM	NM
SMW-6-U	09/11/09	13:02	5	9	--- [a]	18.9	1.7	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.02	NM	NM
SMW-6-M	09/11/09	13:17	20	25	--- [a]	18.8	2.0	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.02	NM	NM
SMW-6-L	09/11/09	13:41	55	67.26	67.26	10.7	7.9	<0.1	<0.1	<1	<1	<0.9	0.9	-0.09	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Sentinel Wells																
SMW-7-U	09/11/09	15:59	5	9	--- [a]	19.1	0.3	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.05	NM	NM
SMW-7-M	09/11/09	16:14	20	25	--- [a]	18.3	1.1	0.1	<0.1	<1	<1	<0.5	<0.5	-0.05	NM	NM
SMW-7-L	09/11/09	16:31	55	67.52	67.52	12.5	3.7	<0.1	<0.1	<1	<1	<0.8	<0.8	-0.1	NM	NM
SMW-8-U	09/03/09	2:00	5	9	--- [a]	7.8	3.4	0.2	0.3	4	6	285.2	290.6	-0.025	NM	NM
SMW-8-M	09/03/09	2:30	20	25	--- [a]	7.1	5.1	0.3	0.3	6	6	<1.5	<1.5	0	NM	NM
SMW-9-U	09/03/09	3:10	5	9	--- [a]	15	3.3	0.1	0.3	2	6	<0.5	<0.5	-0.05	NM	NM
SMW-9-M	09/03/09	3:35	20	25	--- [a]	14.8	3	0.3	0.3	6	6	<0.5	<0.5	0	NM	NM
SMW-9-L	09/03/09	4:05	55	95	NA	12.1	3.1	<0.1	<0.1	<1	<1	<1.0	<1.0	0	NM	NM
SMW-10-U	09/02/09	2:15	5	9	--- [a]	12.5	5.5	<0.1	<0.1	<1	<1	<0.8	<0.8	0.05	NM	NM
SMW-10-M	09/02/09	2:32	20	25	--- [a]	11.3	6.2	<0.1	<0.1	<1	<1	<0.9	<0.9	-0.5	NM	NM
SMW-10-L	09/02/09	3:05	55	95	NA	12	4.7	<0.1	<0.1	<1	<1	<0.9	<0.9	0	NM	NM
SMW-11-U	09/03/09	23:19	5	9	--- [a]	0.9	10.7	<0.1	<0.1	<1	<1	<1.8	<1.8	-0.21	NM	NM
SMW-11-M	09/03/09	23:34	20	25	--- [a]	3.1	8.2	<0.1	<0.1	<1	<1	<1.5	<1.5	-0.21	NM	NM
SMW-11-L	09/03/09	23:57	55.2	75.18	75.18	16.7	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.21	NM	NM
SMW-12-U	09/03/09	4:45	5	9	--- [a]	13.4	4.9	<0.1	<0.1	<1	<1	<0.7	<0.7	0	NM	NM
SMW-12-M	09/03/09	5:10	20	25	--- [a]	10.5	5.8	<0.1	<0.1	<1	<1	<1.1	<1.1	0	NM	NM
SMW-13-U	09/03/09	23:45	5	9	--- [a]	8.3	7.5	<0.1	<0.1	<1	<1	<1.3	<1.3	-0.075	NM	NM
SMW-13-M	09/03/09	0:40	19.1	24.1	--- [a]	9	6.2	0.2	0.3	4	6	186.9	204.9	-0.05	NM	NM
SMW-13-L	09/03/09	1:12	54.9	73.67	73.67	13.8	1.6	0.2	0.2	4	4	<0.5	<0.5	0	NM	NM
SMW-14-U	09/03/09	8:54	5	9	--- [a]	12.9	3.7	<0.1	<0.1	<1	<1	<0.7	<0.7	-0.02	NM	NM
SMW-14-M	09/03/09	9:08	20	25	--- [a]	11	4	<0.1	<0.1	<1	<1	<0.9	<0.9	-0.05	NM	NM
SMW-14-L	09/03/09	9:27	55	73.43	73.43	7.9	3.1	<0.1	<0.1	<1	<1	<1.3	<1.3	-0.02	NM	NM
Groundwater Monitoring Wells																
ASE-112A	09/02/09	4:10	68	93	NA	8.8	3.2	<0.1	<0.1	<1	<1	17.5	30.3	0	NM	NM
Manhole																
SW-MH-01	09/03/09	7:28	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
SW-MH-02	09/03/09	7:42	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
Sub-slab																
P-31	09/15/09	16:54	5.5	6	--- [a]	21.2	0.2	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.01	NM	NM
P-31 [b]	09/17/09	8:06	NA	NA	--- [a]	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Sub-slab																
P-32	09/13/09	10:33	5.5	6	--- [a]	20.8	0.9	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
P-32 [f]	09/13/09	10:34	5.5	6	--- [a]	20.3	1.2	<0.1	<0.1	<1	<1	<0.5	<0.5	0	NM	NM
P-32 [b]	09/17/09	8:00	NA	NA	--- [a]	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-33	09/15/09	15:35	5.5	6	--- [a]	20.1	0.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.11	NM	NM
P-33 [b]	09/16/09	16:24	NA	NA	--- [a]	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-35	09/15/09	10:29	5.5	6	--- [a]	19.1	0.8	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.05	NM	NM
P-35 [b]	09/16/09	16:40	NA	NA	--- [a]	21.3	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-36	09/15/09	17:25	5.5	6	--- [a]	19.9	1.0	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.04	NM	NM
P-36 [b]	09/16/09	7:46	NA	NA	--- [a]	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-37	09/15/09	15:07	5.5	6	--- [a]	20.5	0.1	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.09	NM	NM
P-37 [b]	09/16/09	16:30	NA	NA	--- [a]	21.1	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-38	09/15/09	14:33	5.5	6	--- [a]	20.1	0.8	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.12	NM	NM
P-38 [b]	09/16/09	16:35	NA	NA	--- [a]	21.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-39	09/15/09	17:52	5.5	6	--- [a]	19.1	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.01	NM	NM
P-39 [b]	09/17/09	7:41	NA	NA	--- [a]	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
P-41	09/15/09	16:12	5.5	6	--- [a]	19.0	1.6	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.01	NM	NM
P-41 [b]	09/16/09	7:35	NA	NA	--- [a]	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
SVV-1	09/14/09	14:49	4.75	5.25	--- [a]	21.1	1.1	0.1	0.1	3	3	<0.5	<0.5	-0.17	NM	NM
SVV-1 [b]	09/17/09	7:22	NA	NA	--- [a]	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
SVV-2	09/15/09	9:30	5	5.5	--- [a]	20.3	0.3	<0.1	<0.1	<1	<1	7.8	7.9	-0.05	NM	NM
SVV-2 [b]	09/16/09	17:17	NA	NA	--- [a]	21.1	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
SVV-3	09/14/09	15:35	5	5.5	--- [a]	13.4	5.0	0.1	0.1	2	2	<0.7	<0.7	-0.25	NM	NM
SVV-3 [b]	09/16/09	17:00	NA	NA	--- [a]	21.3	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
SVV-4	09/14/09	14:22	5	5.5	--- [a]	20.0	0.7	<0.1	<0.1	<1	<1	<0.5	<0.5	-0.05	NM	NM
SVV-4 [b]	09/16/09	17:09	NA	NA	--- [a]	21.2	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
PSHIA Utility Vaults																
ELE-VLT-01	09/03/09	7:31	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-02	09/03/09	7:34	NA	NA	NA	21.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-03	09/03/09	7:39	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-04	09/03/09	7:46	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
PSHIA Utility Vaults																
ELE-VLT-05	09/03/09	7:48	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-06	09/03/09	7:50	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-07	09/03/09	7:53	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-08	09/03/09	7:55	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-09	09/03/09	7:56	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-10	09/03/09	7:58	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-11	09/03/09	8:12	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-12	09/03/09	8:14	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-13	09/03/09	8:22	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-14	09/03/09	8:20	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-15	09/03/09	8:06	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-16	09/03/09	8:08	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-17	09/03/09	8:10	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-18	09/03/09	8:24	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-19	09/03/09	8:17	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-20	09/03/09	8:30	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
ELE-VLT-21	09/03/09	8:27	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
FBO-VLT-01	09/03/09	7:35	NA	NA	NA	20.6	0.2	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
FBO-VLT-02	09/03/09	7:37	NA	NA	NA	20.9	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
FBO-VLT-03	09/03/09	7:58	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
Honeywell Utility Vaults																
VLT-1093	09/16/09	9:02	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1094	09/16/09	9:00	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1095	09/16/09	8:06	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1100	09/16/09	8:57	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1115	09/16/09	9:32	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1134	09/16/09	9:11	NA	NA	NA	20.3	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1135	09/16/09	9:13	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1141	09/16/09	9:34	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1142	09/16/09	9:28	NA	NA	NA	20.2	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM

TABLE 3-3
Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Honeywell Utility Vaults																
VLT-1143	09/16/09	9:26	NA	NA	NA	20.1	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1144	09/16/09	9:24	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1149	09/16/09	9:16	NA	NA	NA	20.3	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1150	09/16/09	9:18	NA	NA	NA	20.2	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1153	09/16/09	10:46	NA	NA	NA	20.1	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1154	09/16/09	10:44	NA	NA	NA	20.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1155	09/16/09	9:44	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1156	09/16/09	9:41	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1160	09/16/09	11:30	NA	NA	NA	20.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1164	09/16/09	10:58	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1165	09/16/09	10:55	NA	NA	NA	20.3	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1269	09/16/09	11:11	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1270	09/16/09	11:13	NA	NA	NA	20.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1272	09/16/09	11:20	NA	NA	NA	20.1	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-1273	09/16/09	11:24	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-2007	09/16/09	15:36	NA	NA	NA	20.6	<0.1	<0.1	<0.1	<1	1	NM	NM	NM	NM	NM
VLT-2008	09/16/09	15:39	NA	NA	NA	20.1	<0.1	<0.1	<0.1	<1	1	NM	NM	NM	NM	NM
VLT-2012	09/16/09	15:45	NA	NA	NA	20.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-2013	09/16/09	15:48	NA	NA	NA	20.5	<0.1	<0.1	<0.1	1	1	NM	NM	NM	NM	NM
VLT-2032	09/16/09	15:26	NA	NA	NA	20.4	<0.1	<0.1	<0.1	1	1	NM	NM	NM	NM	NM
VLT-2046	09/16/09	15:10	NA	NA	NA	19.7	0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-2126	09/16/09	15:07	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-2127	09/16/09	15:15	NA	NA	NA	19.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-2144	09/16/09	15:00	NA	NA	NA	19.7	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-2145	09/16/09	14:55	NA	NA	NA	19.5	0.4	<0.1	0.1	1	3	NM	NM	NM	NM	NM
VLT-2178	09/16/09	15:30	NA	NA	NA	20.7	<0.1	<0.1	<0.1	<1	1	NM	NM	NM	NM	NM
VLT-3006	09/16/09	11:35	NA	NA	NA	21.1	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3007A	09/16/09	14:00	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3007B	09/16/09	14:02	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3008A	09/16/09	14:05	NA	NA	NA	20.2	0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM

TABLE 3-3

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	TOS (ft bgs)	BOS or DTW (ft bgs)	DTW (ft bmp)	O2 (%)	CO2 (%)	Methane-W (%V/V)	Methane-WO (%V/V)	LEL-W (%V/V)	LEL-WO (%V/V)	FID-W (ppm)	FID-WO (ppm)	Pressure* (in H2O)	RH (%)	Temp (°C)
Honeywell Utility Vaults																
VLT-3008B	09/16/09	14:08	NA	NA	NA	20.2	0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3009	09/16/09	14:15	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3010A	09/16/09	14:36	NA	NA	NA	20.2	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3010B	09/16/09	14:38	NA	NA	NA	20.2	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3023	09/16/09	14:33	NA	NA	NA	20.4	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-3053	09/16/09	14:45	NA	NA	NA	21.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-B102-N-1	09/16/09	11:04	NA	NA	NA	21.0	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-B102-W-1	09/16/09	8:52	NA	NA	NA	20.8	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM
VLT-B102-W-2	09/16/09	8:55	NA	NA	NA	20.5	<0.1	<0.1	<0.1	<1	<1	NM	NM	NM	NM	NM

Notes:

* = Unless otherwise noted, the pressure shown is static pressure at the wellhead prior to purging
[a] = Water level below the bottom of the well
[b] = Environmental monitoring of vault headspace
[c] = Not used
[d] = Wellhead pressure measured during extraction from well
[e] = Instrument reading out of range likely due to interference from non-methane hydrocarbons
[f] = An RKI Eagle portable gas detector was used to collect the field data

-W = measurement taken with a carbon filter
-WO = measurement taken without a carbon filter
%V/V = percent volume per volume
% = percent
°C = degree Celsius
TOS = top of screen
BOS = bottom of screen
DTW = depth to water
CO2 = carbon dioxide
FID = flame ionization detector

ft bgs = feet below ground surface
ft bmp = feet below measuring point
LEL = lower explosive limit
O2 = oxygen
ppm = parts per million
PSHIA = Phoenix Sky Harbor International Airport
in H2O = inches of water
NM = not measured
NA = not applicable
RH = Relative Humidity
Temp = Temperature

TABLE 3-4

Comparison of Portable Gas Detector Field Results to Analytical Laboratory Results, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Location Type	Date Collected	Field Results Oxygen (%)	Laboratory Results Oxygen (%)	Field Results Carbon Dioxide (%)	Laboratory Results Carbon Dioxide (%)	Field Results TPH (µg/L)	Laboratory Results TPH (µg/L)	Field Results Methane (%)	Laboratory Results Methane (%)
Process Locations										
BSVE-INLET	BSVE Air Treatment System	9/13/09	11.3	12.2	5.6	5.6	8,829	6,054	0.58	0.66
ASE-46A	Injection/Extraction Wells	9/11/09	17.9	16.8	2.6	2.4	<0.18	944	<1.6E-05	0.02
BV-10N	Injection/Extraction Wells	9/11/09	1.1	<0.4	8.4	8.9	12,522	6,099	0.86	0.81
BV-13N	Injection/Extraction Wells	9/11/09	14.8	14.5	4.6	4.7	<0.18	304	<1.6E-05	0.002
BV-19N	Injection/Extraction Wells	9/11/09	6.7	8.4	7.0	6.7	32,432	13,556	2.34	1.83
BV-1N	Injection/Extraction Wells	9/11/09	12.6	11.5	5.0	5.6	<0.18	264	<1.6E-05	0.03
BV-3N	Injection/Extraction Wells	9/12/09	13.9	13.8	6.0	5.6	1,802	1,519	0.04	0.10
BV-9N	Injection/Extraction Wells	9/11/09	15.9	15.3	3.8	3.5	1,441	959	<1.6E-05	0.05
PMW-9-M	Process Monitoring Wells	9/14/09	19.8	18.3	1.0	0.8	<0.18	207	<1.6E-05	<0.0001
PMW-9-U	Process Monitoring Wells	9/14/09	18.9	17.6	1.6	1.5	<0.18	16	<1.6E-05	<0.0001
Non-Process Locations										
SMW-2-M	Sentinel Wells	9/13/09	17.6	NA	3.2	NA	<0.18	26	<1.6E-05	0.0004
SMW-4-L	Sentinel Wells	9/12/09	<0.1	NA	7.4	NA	<0.18	15,032	<1.6E-05	2.29
SMW-4-M	Sentinel Wells	9/12/09	11.6	NA	5.0	NA	<0.18	122	<1.6E-05	0.0004
SMW-4-U	Sentinel Wells	9/12/09	10.9	NA	6.0	NA	<0.18	19	<1.6E-05	0.0004
P-32	Sub-Slab	9/13/09	20.3	NA	1.2	NA	<0.18	113	<1.6E-05	0.0002

Notes:

An RKI Eagle portable gas detector was used to collect the field data.

BSVE = biologically-enhanced soil-vapor extraction

NA = not applicable

TPH = total petroleum hydrocarbons

TPH was calculated by the summation of methane and C1 through C6+ compounds; one half of the laboratory reporting limit was used in calculation for non-detectable concentrations.

% = percent

µg/L = migrograms per liter

TABLE 3-5

Summary of Free-product Thickness Measurements, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Well	07/01/09	07/21/09	08/04/09	08/18/09	09/03/09	09/16/09	09/29/09
ASE-19A	0	NM	0	NM	0	NM	NM
ASE-37A	0	NM	0	NM	0	NM	NM
ASE-38A	0	NM	0	NM	0	NM	NM
ASE-52A	0	NM	0	NM	0	NM	NM
ASE-55A	0	NM	0	NM	0	NM	NM
ASE-58A	0	NM	0	NM	0	NM	NM
ASE-63A	0	NM	0	NM	0	NM	NM
ASE-64A	0	NM	0	NM	0	NM	NM
ASE-67A	0.09	0.09	0.09	NM	0.14	NM	NM
ASE-68A	0	NM	0	NM	0	NM	NM
ASE-89A	0.01	NM	0.01	NM	0.01	NM	NM
ASE-90A	0.01	NM	0.01	NM	0.01	NM	NM
ASE-91A	0.01	NM	0.01	NM	0.01	NM	NM
ASE-92A	0.03	NM	0	NM	0	NM	NM
ASE-96A	0	NM	0	NM	0	NM	NM
ASE-102A	0.04	NM	0.04	NM	0.01	NM	NM
ASE-107A	0.63	0.85	0.53	0.55	0	1.31	0.56
ASE-111A	0.06	NM	0.07	NM	0.08	NM	NM
ASE-113A	0	NM	0	NM	0	NM	NM
ASE-114A	0.02	NM	0.08	NM	0.08	0.06	NM
ASE-115A	0.05	NM	0.04	NM	0.04	NM	NM
ASE-130A	0.02	NM	0	NM	0.01	NM	NM
PL-105A	0	NM	0	NM	0	NM	NM
PL-2101	0	NM	0	NM	0	NM	NM

Notes:

This table includes all wells that have historically had measureable free product that are not currently connected to the BSVE system.

Monitoring wells with a free-product thickness less than 0.1 foot are measured monthly.

Monitoring wells with a free-product thickness greater than 0.1 foot are measured biweekly.

Free-product thickness measurements in feet.

NM = Free-product thickness not measured.

TABLE 3-6

Comparison of Historical Maximum Free-product Thickness Measurements to September 2009 Free-product Thickness Measurements, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

	Historical Maximum Free-product Thickness		September 2009 Free-product Thickness Measurements		
Well	**Date**	**Thickness**	**09/03/09**	**09/16/09**	**09/29/09**
Monitoring Wells Located on Honeywell Property North of Air Lane					
ASE-19A	02/10/00	3.00	0	NM	NM
ASE-20A	01/07/03	2.20	NA	NA	NA
ASE-37A	01/20/05	0.53	0	NM	NM
ASE-38A	07/21/04	1.73	0	NM	NM
ASE-39A	11/28/01	1.33	NA	NA	NA
ASE-51A	12/19/01	3.42	NA	NA	NA
ASE-52A	02/22/02	1.80	0	NM	NM
ASE-53A	11/28/01	1.79	NA	NA	NA
ASE-56A	03/21/02	1.90	0	NA	NA
ASE-57A	03/20/02	3.07	NA	NA	NA
ASE-67A	07/26/05	4.52	0.14	NM	NM
ASE-68A	06/27/02	3.13	0	NM	NM
ASE-111A	10/03/07	2.25	0.08	NM	NM
ASE-115A	11/28/07	0.41	0.04	NM	NM
PL-101A	03/06/02	1.41	NA	NA	NA
PL-2101	06/14/00	0.44	0	NM	NM
Monitoring Wells Located on Honeywell Property South of Air Lane					
ASE-41A	07/09/03	3.50	NA	NA	NA
ASE-55A	10/19/05	0.81	0	NM	NM
ASE-58A	05/07/08	0.01	0	NM	NM
ASE-63A	09/09/04	0.02	0	NM	NM
ASE-64A	07/09/03	1.95	0	NM	NM
ASE-91A	10/03/07	0.05	0.01	NM	NM
ASE-92A	11/03/04	0.24	0	NM	NM
ASE-130A	01/07/09	0.16	0.01	NM	NM
PL-105A	04/30/03	1.07	0	NM	NM
Monitoring Wells Located on PSHIA Property					
ASE-89A	08/02/04	1.60	0.01	NM	NM
ASE-90A	10/06/04	1.23	0.01	NM	NM
ASE-96A	11/03/04	0.48	0	NM	NM
ASE-102A	01/26/05	4.27	0.01	NM	NM
ASE-107A	07/04/07	1.87	0	1.31	0.56
ASE-113A	05/18/05	0.01	0	NM	NM
ASE-114A	02/05/09	0.26	0.08	0.06	NM

Notes:
This table includes all wells that have historically had measureable free product.
Monitoring wells with a free-product thickness less than 0.1 foot are measured monthly.
Monitoring wells with a free-product thickness greater than 0.1 foot are measured biweekly.
Free-product thickness measurements in feet.
Dates listed are the most recent dates on which the historical maximum free-product thickness was measured.
NA = Measurement not available due to connection to the BSVE system.
NM = Free-product thickness not measured.
PSHIA = Phoenix Sky Harbor International Airport

TABLE 3-7

Comparison between June 2009 and September 2009 Water-level Elevations, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

	Groundwater Elevation		
Location ID	**06/03/09 (ft amsl)**	**09/03/09 (ft amsl)**	**Difference [a] (feet)**
ASE-19A	1,054.94	1,053.99	-0.95
ASE-37A	1,058.41	1,057.03	-1.38
ASE-38A	1,058.71	1,057.33	-1.38
ASE-52A	1,057.80	1,056.66	-1.14
ASE-54A	1,053.02	1,052.20	-0.82
ASE-55A	1,049.35	1,048.52	-0.83
ASE-58A	1,051.62	1,050.65	-0.97
ASE-60A	1,059.13	1,057.90	-1.23
ASE-61A	1,059.59	1,058.29	-1.30
ASE-62A	1,049.86	1,048.64	-1.22
ASE-63A	1,057.14	1,055.77	-1.37
ASE-64A	1,053.86	1,051.87	-1.99
ASE-65A	1,040.75	1,038.74	-2.01
ASE-67A	1,057.95	1,056.76	-1.19
ASE-68A	1,054.04	1,053.03	-1.01
ASE-89A	1,052.51	1,050.41	-2.10
ASE-90A	1,051.30	1,049.09	-2.21
ASE-91A	1,051.56	1,049.82	-1.74
ASE-92A	1,052.05	1,050.29	-1.76
ASE-95A	1,042.37	1,040.03	-2.34
ASE-96A	1,050.64	1,048.22	-2.42
ASE-97A	1,042.17	1,040.06	-2.11
ASE-98A	1,046.48	1,043.75	-2.73
ASE-99A	1,048.16	1,045.39	-2.77
ASE-100A	1,042.32	1,040.91	-1.41
ASE-101A	1,046.55	1,043.83	-2.72
ASE-102A	1,049.56	1,047.00	-2.56
ASE-103A	1,041.61	1,039.22	-2.39
ASE-105A	1,053.23	1,050.96	-2.27
ASE-106A	1,050.75	1,048.24	-2.51
ASE-107A	1,051.71	1,049.72	-1.99
ASE-108A	1,050.26	1,048.62	-1.64
ASE-109A	1,053.21	1,050.57	-2.64
ASE-110A	1,051.64	1,048.95	-2.69
ASE-111A	1,058.75	1,057.45	-1.30
ASE-112A	1,053.56	1,050.62	-2.94
ASE-113A	1,053.63	1,051.04	-2.59
ASE-114A	1,052.85	1,050.30	-2.55
ASE-115A	1,058.88	1,057.55	-1.33
ASE-116A	1,058.61	1,057.33	-1.28
ASE-122A	1,054.34	1,051.72	-2.62
ASE-123A	1,053.58	1,051.94	-1.64
ASE-124A	1,043.05	1,040.70	-2.35
ASE-125A	1,039.19	1,036.95	-2.24
ASE-126A	1,041.08	1,038.84	-2.24
ASE-127A	1,056.71	1,055.30	-1.41

TABLE 3-7

Comparison between June 2009 and September 2009 Water-level Elevations, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

	Groundwater Elevation		
Location ID	**06/03/09 (ft amsl)**	**09/03/09 (ft amsl)**	**Difference [a] (feet)**
ASE-128A	1,046.55	1,043.88	-2.67
ASE-129A	1,040.04	1,037.64	-2.40
ASE-130A	1,052.37	1,050.94	-1.43
BC-7A	1,057.68	1,055.82	-1.86
BC-8B	1,050.28	1,048.31	-1.97
BC-18	1,039.98	1,037.85	-2.13
PL-105A	1,050.63	1,048.95	-1.68
PL-201A	1,050.78	1,049.75	-1.03
PL-2101	1,053.43	1,052.55	-0.88
PL-2102	1,053.11	1,050.32	-2.79

Notes:

[a] Difference column calculated by subtracting June 2009 water-level elevations from September 2009 water-level elevations. Negative results indicate lower water-level elevations, signifying a falling water table over the reporting period; postive results indicate higher water-level elevations, signifying a rising water table over the reporting period.

ft amsl = Feet above mean sea level

TABLE 3-8
Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	111TCA	DCA	DCE	124TMBZ	135TMBZ	BZ	BBZ	CD	CET	CHCL3	C12DCE	EBZ	IPBZ	MTBE	CH2Cl2	NAPH	n-PBZ	p-IPT	s-BBZ	t-BBZ	PCE	TPH C10-C22
ASE-37A	09/18/09	<0.5	<0.5	<0.5	3.6	<0.5	46	1.4	<0.5	<1.0	<0.5	<0.5	1.4	8.8	7.0	<10	10 J	6.7	<0.5	2.2	<0.5	<0.5	<1,000
ASE-38A	09/17/09	<5.0	<5.0	<5.0	<5.0	<5.0	470	<5.0	<5.0	<10	<5.0	<5.0	12	18	22	<100	37	15	<5.0	<5.0	<5.0	<5.0	<1,000
ASE-54A	09/14/09	<0.5	2.7	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.9	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	0.6	<1,000
ASE-55A	09/18/09	<0.5	15	<0.5	1.0	<0.5	10	8.2	<0.5	2.3 J	<0.5	<0.5	1.7	6.9	33	<10	14	6.0	<0.5	4.8 J	1.0	<0.5	6,600
ASE-58A	09/14/09	<0.5	21 J	<0.5	<0.5	<0.5	9.5 J	<0.5	<0.5	1.2 J	<0.5	2.0 J	<0.5	2.4	15 J	<10	<2.0	<0.5	<0.5	1.5	<0.5	<0.5	<1,000
ASE-60A	09/15/09	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	6.2	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	0.9	<1,000
ASE-61A	09/08/09	<0.5	0.5 J	1.5 J	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.8 J	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	1.6 J	<1,000
ASE-62A	09/17/09	<0.5	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	1.0	<0.5	<0.5	10	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-63A	09/18/09	<25	<25	<25	<25	<25	1,400	<25	<25	<50	<25	<25	<25	64	82	<500	190 J	48	<25	<25	<25	<25	1,600
ASE-64A	09/18/09	<0.5	<0.5	<0.5	24	9.6	4.5	3.7	<0.5	<1.0	<0.5	<0.5	37	54	<0.5	<10	35 J	30	1.6	5.7	1.1	<0.5	1,300
ASE-65A	09/15/09	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.8	0.6	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-68A	09/18/09	<0.5	18	<0.5	<0.5	<0.5	3.4	<0.5	<0.5	<1.0	<0.5	1.5	<0.5	1.1	42	<10	<2.0	1.0	<0.5	0.7	0.5	<0.5	<1,000
ASE-84A	09/11/09	<0.5	5.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.6	0.5	<0.5	<0.5	2.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	--
ASE-92A	09/18/09	<2.0	<2.0	<2.0	<2.0	<2.0	120	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	8.8	210	<40	70 J	6.9	<2.0	2.6	<2.0	<2.0	3,300
ASE-95A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	16	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-96A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	65 J	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-97A	09/11/09	<0.5	16 J	2.6 J	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	1.1 J	<0.5	<0.5	37 J	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-98A	09/10/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	11 J	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-99A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-100A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-101A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.8	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-103A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-105A	09/10/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-106A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	1.1	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-108A	09/17/09	4.5 J	18	5.5	<0.5	<0.5	49 J	5.6 J	<0.5	2.3	<0.5	1.0	<0.5	10	60	<10	18	6.8	<0.5	3.0 J	<0.5	<0.5	1,900
ASE-109A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-110A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-112A	09/10/09	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	1.0	<0.5	<10	<2.0	<0.5	<0.5	1.0	<0.5	<0.5	<1,000
ASE-113A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-116A	09/17/09	<1.7	<1.7	<1.7	<1.7	<1.7	200	<1.7	1.7	<3.3	<1.7	<1.7	11	75	66	<33	72	67	<1.7	8.5	<1.7	<1.7	1,500
ASE-122A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-123A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-124A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	21	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-125A	09/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-126A	09/10/09	<0.5	13 J	1.0 J	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	1.0 J	<0.5	0.9	72 J	<10	<2.0	<0.5	<0.5	0.9 J	<0.5	<0.5	<1,000
ASE-127A	09/18/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-128A	09/10/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
ASE-129A	09/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
BC-7A	09/18/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000

TABLE 3-8

Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	111TCA	DCA	DCE	124TMBZ	135TMBZ	BZ	BBZ	CD	CET	CHCL3	C12DCE	EBZ	IPBZ	MTBE	CH2Cl2	NAPH	n-PBZ	p-IPT	s-BBZ	t-BBZ	PCE	TPH C10-C22
BC-8B	09/11/09	<1.0	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	140	<20	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1,000
PL-105A	09/17/09	<0.5	13	<0.5	<0.5	<0.5	64	5.6	<0.5	2.3 J	<0.5	<0.5	<0.5	15	56	<10	19	11	<0.5	5.4	0.8	<0.5	3,300
PL-201A	09/15/09	<0.5	71	<0.5	<0.5	<0.5	4.9	<0.5	<0.5	5.0	<0.5	1.1	<0.5	<0.5	26	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
PL-2101	09/14/09	<0.5	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	3.4	<10	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1,000
PL-2102	09/14/09	<0.5	0.9	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.8	<0.5	<0.5	<0.5	<0.5	<10	<2.0	<0.5	<0.5	<0.5	<0.5	0.6	<1,000

TABLE 3-8
Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	TCE	VC	mp-XYL	XYL
ASE-37A	09/18/09	1.2	<0.5	<0.5	<0.5
ASE-38A	09/17/09	<5.0	<5.0	<5.0	<5.0
ASE-54A	09/14/09	2.9	<0.5	<0.5	<0.5
ASE-55A	09/18/09	<0.5	1.6	2.4	2.4
ASE-58A	09/14/09	1.0 J	4.1 J	<0.5	<0.5
ASE-60A	09/15/09	5.7	<0.5	<0.5	<0.5
ASE-61A	09/08/09	0.9 J	<0.5	<0.5	<0.5
ASE-62A	09/17/09	1.4	2.0	<0.5	<0.5
ASE-63A	09/18/09	<25	<25	<25	<25
ASE-64A	09/18/09	<0.5	<0.5	94	94
ASE-65A	09/15/09	3.3	<0.5	<0.5	<0.5
ASE-68A	09/18/09	1.5	3.6	<0.5	<0.5
ASE-84A	09/11/09	2.3	<0.5	<0.5	<0.5
ASE-92A	09/18/09	<2.0	<2.0	<2.0	<2.0
ASE-95A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-96A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-97A	09/11/09	1.5 J	1.6 J	<0.5	<0.5
ASE-98A	09/10/09	<0.5	<0.5	<0.5	<0.5
ASE-99A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-100A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-101A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-103A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-105A	09/10/09	<0.5	<0.5	<0.5	<0.5
ASE-106A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-108A	09/17/09	3.2	1.8	<0.5	<0.5
ASE-109A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-110A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-112A	09/10/09	<0.5	<0.5	<0.5	<0.5
ASE-113A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-116A	09/17/09	<1.7	<1.7	<1.7	<1.7
ASE-122A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-123A	09/11/09	<0.5	<0.5	<0.5	<0.5
ASE-124A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-125A	09/09/09	<0.5	<0.5	<0.5	<0.5
ASE-126A	09/10/09	1.2 J	1.2 J	<0.5	<0.5
ASE-127A	09/18/09	<0.5	<0.5	<0.5	<0.5
ASE-128A	09/10/09	<0.5	<0.5	<0.5	<0.5
ASE-129A	09/11/09	<0.5	<0.5	<0.5	<0.5
BC-7A	09/18/09	0.6	<0.5	<0.5	<0.5

TABLE 3-8

Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, Third Quarter 2009

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	TCE	VC	mp-XYL	XYL
BC-8B	09/11/09	3.1	<1.0	<1.0	<1.0
PL-105A	09/17/09	<0.5	1.0	<0.5	<0.5
PL-201A	09/15/09	1.4	5.5	<0.5	<0.5
PL-2101	09/14/09	1.6	3.3	<0.5	<0.5
PL-2102	09/14/09	2.1	<0.5	<0.5	<0.5

Notes:

All results are reported in micrograms per liter.
Maximum concentration between primary samples and field duplicates is shown.
-- = Not analyzed
J = Estimated value
111TCA = 1,1,1-Trichloroethane
124TMBZ = 1,2,4-Trimethylbenzene
135TMBZ = 1,3,5-Trimethylbenzene
BBZ = Butylbenzene
BZ = Benzene
C12DCE = cis-1,2-Dichloroethene
CD = Carbon disulfide
CET = Chloroethane
CH2Cl2 = Methylene chloride
CHCL3 = Chloroform
DCA = 1,1-Dichloroethane
DCE = 1,1-Dichloroethene
EBZ = Ethylbenzene
IPBZ = Isopropylbenzene
mp-XYL = Xylenes, m & p
MTBE = Methyl ter-butyl ether
NAPH = Naphthalene
n-PBZ = n-Propylbenzene
PCE = Tetrachloroethene
p-IPT = p-Isopropyltoluene
s-BBZ = sec-Butylbenzene
t-BBZ = tert-Butylbenzene
TCE = Trichloroethene
TPH C10-C22 = Total Petroleum Hydrocarbons, Carbon Range C10-C22
VC = Vinyl chloride
XYL = Total xylenes

TABLE 4-1
Contingency Triggers and Contingency Measures, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Contingency Trigger	Trigger		Quarterly Observations	Contingency Triggered	Contingency Measure(s) Taken
Vadose Zone					
Changing Site Conditions	Water Levels, Contaminant Type or Distribution, Estimated Contaminant Mass	Re-evaluate the remedial strategy approach if a change in the site conditions impacting the propriety or efficacy of the selected remedy occurs.	No significant changes from previous quarter.	No	--
Performance Metrics Cannot Be Maintained for 3 Continuous Months.	Biodegradation Rate	Significant Decreases	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred. The metrics will be discussed in the First Quarter 2010 Status Report.	--	--
		Rates Not Consistent with Achieving the Remediation Standards within the Prescribed times of system startup.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred. The metrics will be discussed in the First Quarter 2010 Status Report.	--	--
	TPH in Soil Vapor	Failure of TPH concentrations in soil-vapor to decline or problematic rebound.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred. The metrics will be discussed in the First Quarter 2010 Status Report.	--	--
	Temperature	Subsurface reductions greater than 50% of the observed temperature rise.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred. The metrics will be discussed in the First Quarter 2010 Status Report.	--	--
	Subsurface Moisture	Drying of the soils in the deep vadose zone to the point that biodegradation is greatly reduced or not possible.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred. The metrics will be discussed in the First Quarter 2010 Status Report.	--	--
	Groundwater levels	Failure to decrease in any consecutive 12-month period during BSVE operations.	The groundwater levels will be evaluated prior to the first 12-month period of BSVE operations following completion of the initial ramp-up period and summarized in the First Quarter 2011 Status Report.	--	--
	Mass Removal Rates	Failure to achieve and maintain a removal rate of initially, 2,000 pounds per day of TPH within 12 months of initiation (Honeywell only), and then 3,000 pound per day of TPH within 12 months of startup of the combined system (Honeywell and PSHIA).	The mass removal rates will be evaluated prior to the first 12-month period of full-scale BSVE operations (extraction and injection) and summarized in the first quarterly status report after achieving full-scale operations.	--	--
Toxicity and Safety Standards	Soil-vapor Concentrations of Methane or Any Petroleum Hydrocarbon	Exceed 20% of LEL in vadose zone	The 20% LEL threshold was not exceeded for any soil-vapor locations monitored during Third Quarter 2009. Increased monitoring of soil gas continues as the result of earlier detections.	No	
	Fuel Related COCs	Exceed Risk-Based Corrective Action Standards determined by Risk Assessment	Among the 60 non-process soil-vapor monitoring wells and 20 process soil-vapor monitoring wells sampled, no risk based corrective action standards (i.e., Tier 1 or Tier 2 VALs) were exceeded.	No	--
Remediation Standards	Soil-vapor Concentrations of VOCs	Soil-vapor concentrations of benzene exceed 340 µg/L in the vadose zone	These standards will be evaluated within 18 months of system startup.	--	--
	Soil-vapor Concentrations of COCs	Soil-vapor concentrations of COCs exceed risk-based corrective action standards determined by risk assessment in the deep vadose zone.	These standards will be evaluated within 18 months of system startup.	--	--
	Soil-vapor Concentrations of Oxygen	Soil-vapor concentrations of oxygen shall not exceed 5% by volume in the deep vadose zone.	These standards will be evaluated within 18 months of system startup.	--	--
	Methane	Soil-vapor concentrations of methane exceed 1% by volume in the deep vadose zone.	These standards will be evaluated within 18 months of system startup.	--	--

TABLE 4-1
Contingency Triggers and Contingency Measures, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

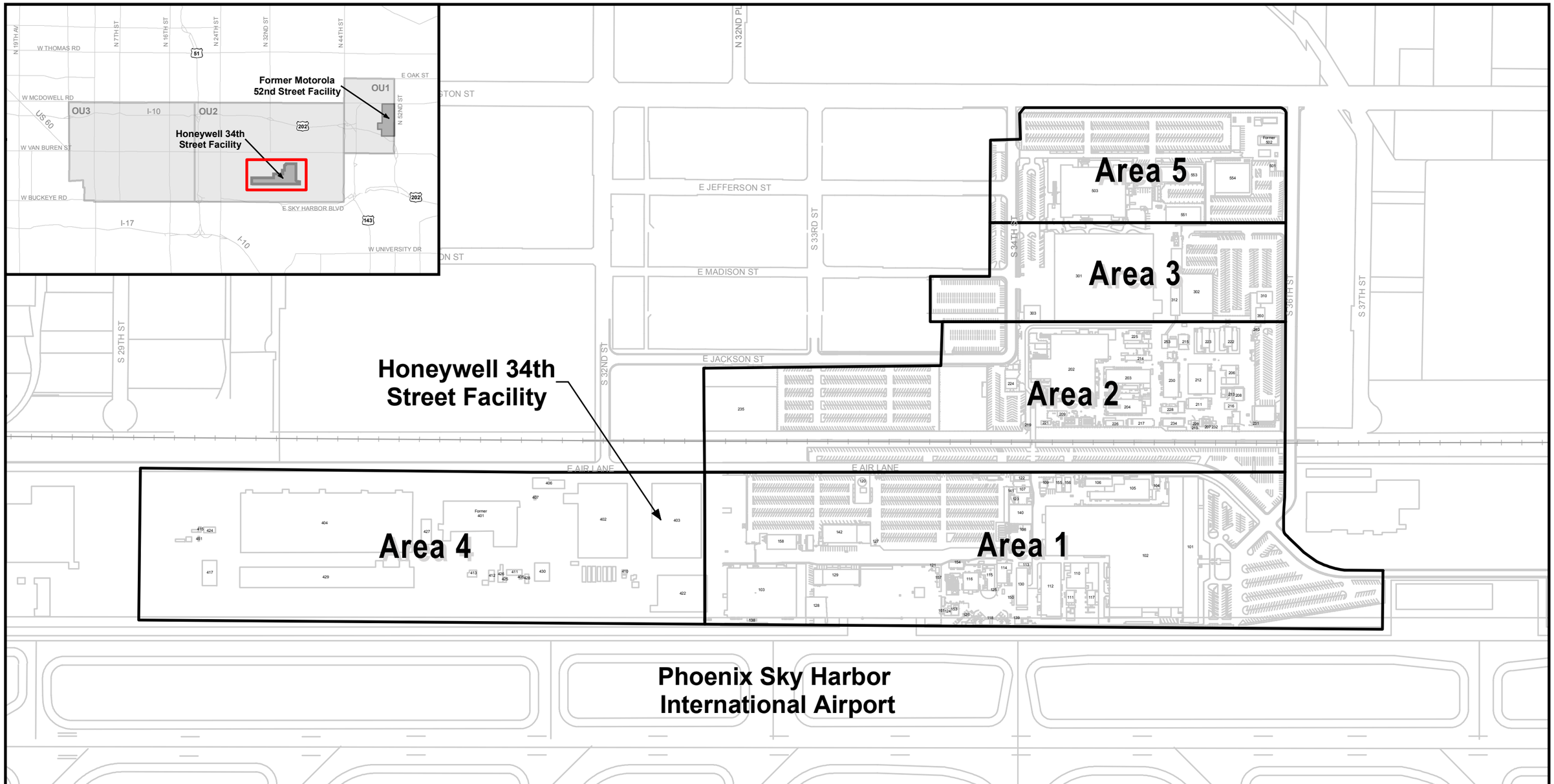
Contingency Trigger		Trigger	Quarterly Observations	Contingency Triggered	Contingency Measure(s) Taken
Free-product Jet Fuel					
Free-product Thickness		During any 24-month period of remedial operation, free-product thicknesses in any well increases.	This trigger will be evaluated after the initial ramp-up period for the BSVE system has been completed and startup has occurred.	--	--
		Wells with confirmed free-product thicknesses in excess of 0.75 foot.	Free-product thickness measurements exceeding 0.75 foot were confirmed for monitoring well ASE-107A during Third Quarter 2009, on July 21, 2009 and September 16, 2009, for monitoring well ASE-107A.	--	A dedicated, automatic free-product pump was not installed because installation of recovery equipment in ASE-107A would cause disruption to airport operations. Pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (in regard to the initial occurrence of a metric exceedance in monitoring well ASE 107A), Honeywell plans on continuing biweekly manual free-product recovery.
		Wells with free product in excess of 0.1 foot but less than 0.75 foot.	Free-product thicknesses exceeding 0.1 foot but less than 0.75 foot occurred in two monitoring wells (ASE-67A and ASE-107A) during the quarter.	--	Manual recovery of free product will continue to be conducted biweekly in ASE-107A. Monitoring well ASE-67A was under evaluation for inclusion in the biweekly program at the end of Third Quarter 2009 (a confirmation exceedance of the 0.1 foot metric in monitoring well ASE-67A was recorded on October 13, 2009 resulting in the placement of ASE-67A back into the biweekly program).
Groundwater Levels		Groundwater levels in any given 12-month period are substantially above the levels of December 2004.	September 3, 2009 water levels are between 5 feet and 18 feet higher than December 1, 2004 water levels.	Yes	As reported during Second Quarter 2009, Honeywell evaluated the impact of rising groundwater levels in the Phase C and D areas. For the Phase C design, three additional injection/extraction wells were added, bringing the total well count to ten. For Phase D, Honeywell provided COP with a short list of alternatives to address the submerged free product. Honeywell and COP are working collaboratively on preparing a detailed report identifying the preferred alternative. For Phases A and B, continued extraction operations along with initiation of air injection activities will occur.
Minimization of Remedial Time		Free-product thickness is not reduced to less than 0.01 feet within 10 years.	This trigger will be evaluated after the initial ramp-up period for the BSVE system has been completed and startup has occurred.	--	--
Performance Metrics	Wells with automatic free-product extraction systems	Automated free-product recovery will cease when free-product thicknesses fall below 0.75 foot and product recovery rates diminish to less than 2 gallons per month for 2 consecutive months.	No wells contained dedicated, automatic free-product pumps during the quarter.	--	--
	Wells with manual free product recovery	Less than 0.1 foot of free product is present and less than 2 gallons per month are recovered for 3 consecutive months. Well has between 0.1 and 0.75 foot of free product, which after 6 months of attempted recovery, does not yield a minimum of 2 gallons in at least 1 month.	Free-product thicknesses were below 0.1 foot in monitoring well ASE-67A during the first half of the quarter and no free product was recovered during that time. Free product is not recovered from wells containing free-product thicknesses of less than 0.1 foot.	--	Manual recovery of free product from monitoring well ASE-67A ceased during the quarter due to free-product measurements below 0.1 foot; however, manual recovery recommenced on September 3, 2009 as a result of a free product measurement exceeding the 0.1 foot metric.
Commingled Plumes		Honeywell free-product plume has commingled or is threatening to commingle with other free-product plumes beneath PSHIA.	This trigger will be evaluated after the initial ramp-up period for the BSVE system has been completed and startup has occurred. However, there was no evidence of plume commingling during the quarter.	--	--
Changing Site Conditions		Significant variations in water levels, contaminant type or distribution, estimated contaminant mass, and/or lithology type containing the majority of contaminant mass.	This trigger will be evaluated after the initial ramp-up period for the BSVE system has been completed and startup has occurred. However, there were no significant variations in site conditions from the previous quarter.	--	--

TABLE 4-1
Contingency Triggers and Contingency Measures, Third Quarter 2009
Honeywell 34th Street Facility, Phoenix, Arizona

Contingency Trigger	Trigger	Quarterly Observations	Contingency Triggered	Contingency Measure(s) Taken
Dissolved Phase Contaminants of Concern				
Dissolved phase COC triggers will be evaluated following approval of the groundwater component of Honeywell's CAP.				

Notes:
ADEQ = Arizona Department of Environmental Quality
BSVE = biologically enhanced soil-vapor extraction
CAP = Corrective Action Plan
COC = contaminant of concern
COP = City of Phoenix
LEL = lower explosive limit
LUST = leaking underground storage tank
µg/L =micrograms per liter
mg/L = milligrams per liter
MTBE = methyl tert-butyl ether
PSHIA = Phoenix Sky Harbor International Airport
TPH = total petroleum hydrocarbons
VAL = vapor action level

Figures



Legend

- Street and Airport Features
- Railroad
- Operational Area Boundaries
- Honeywell Buildings

N
W E
S

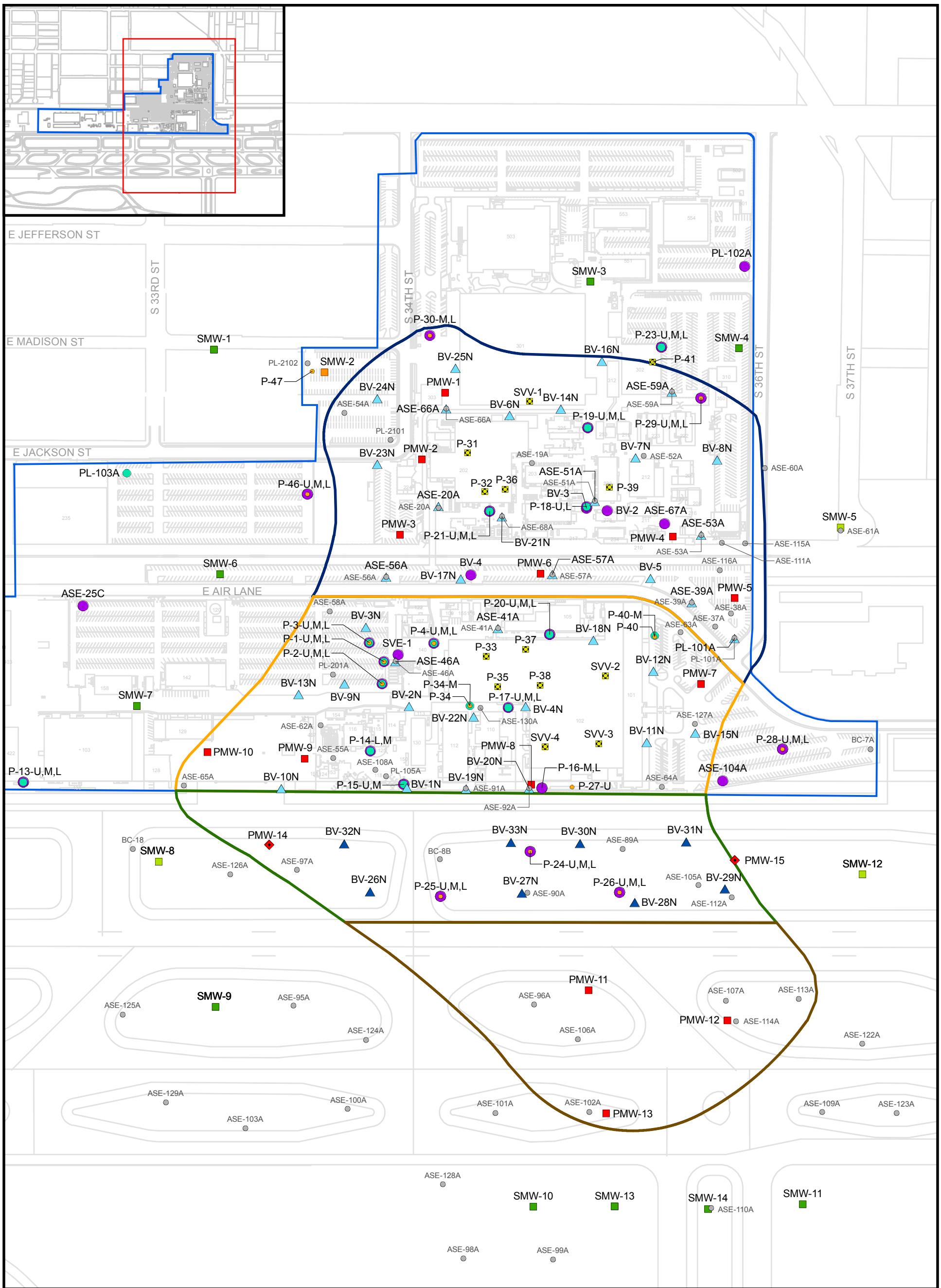
0 200 400 800
Feet

FIGURE 1-1
FACILITY LOCATION AND LAYOUT

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG1-1_FACILITYLOCATIONLAYOUT.MXD TWONG2 10/8/2009 10:29:32



Legend

- UST Monitoring Well

Existing Monitoring Wells

- Existing Sub-slab Monitoring Well
- Existing Sentinel Monitoring Well (Shallow, Intermediate, and Deep Ports)
- Existing Sentinel Monitoring Well (Shallow and Intermediate Ports)
- Existing Sentinel Monitoring Well (Intermediate Ports Only)
- Existing Process Monitoring Well (i.e. convertible)

Proposed Monitoring Wells

- Proposed Process Monitoring Well (i.e. convertible)

BSVE Wells

- Existing Injection/Extraction
- Proposed Injection/Extraction

Honeywell Monitoring Wells

- Shallow (ground surface to 9 feet bgs)
- Intermediate (9 feet to 30 feet bgs)
- Deep (>30 feet bgs)

Remediation Phases (Target Treatment Area)

- Honeywell-owned Property, Phase A
- Honeywell-leased Property, Phase B
- PSHIA Property North of Runway 8-26, Phase C
- PSHIA Property South of Runway 8-26, Phase D

- Street and Airport Features
- Honeywell Facility

N W E S

0 150 300 600 Feet

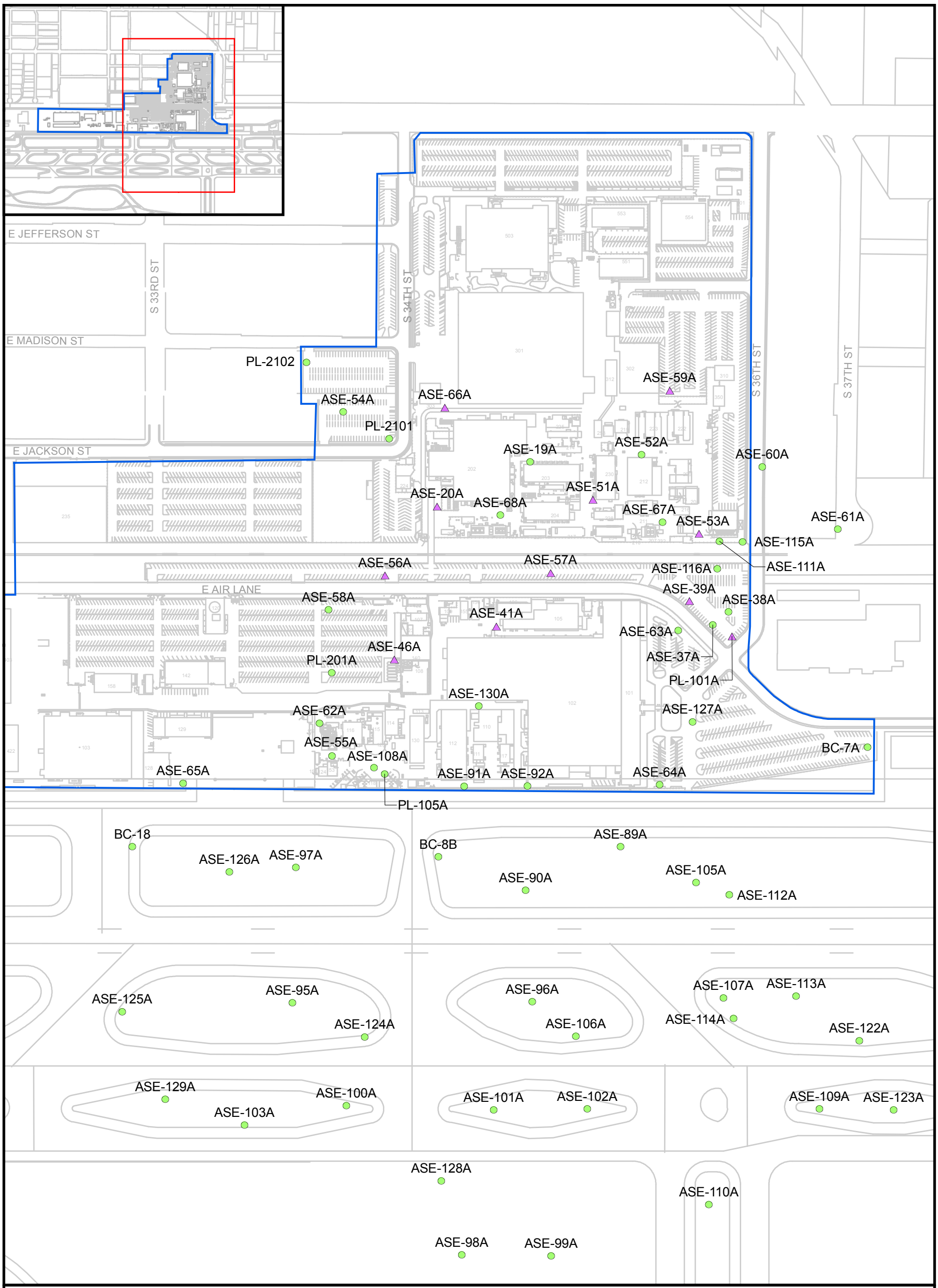
Notes:
1. bgs = Below Ground Surface
2. UST = Underground Storage Tank
3. BSVE = Biologically-enhanced Soil-vapor Extraction

FIGURE 1-2
BSVE SYSTEM SOIL-VAPOR MONITORING WELL NETWORK

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG1-2_BSVE_SVM_WELL_NETWORK.MXD TWONG2 10/12/2009 16:19:18



Legend

- UST Groundwater Monitoring Well
- UST Groundwater Monitoring Well Connected to BSVE System
- Street and Airport Features
- Honeywell Facility

N
W E
S

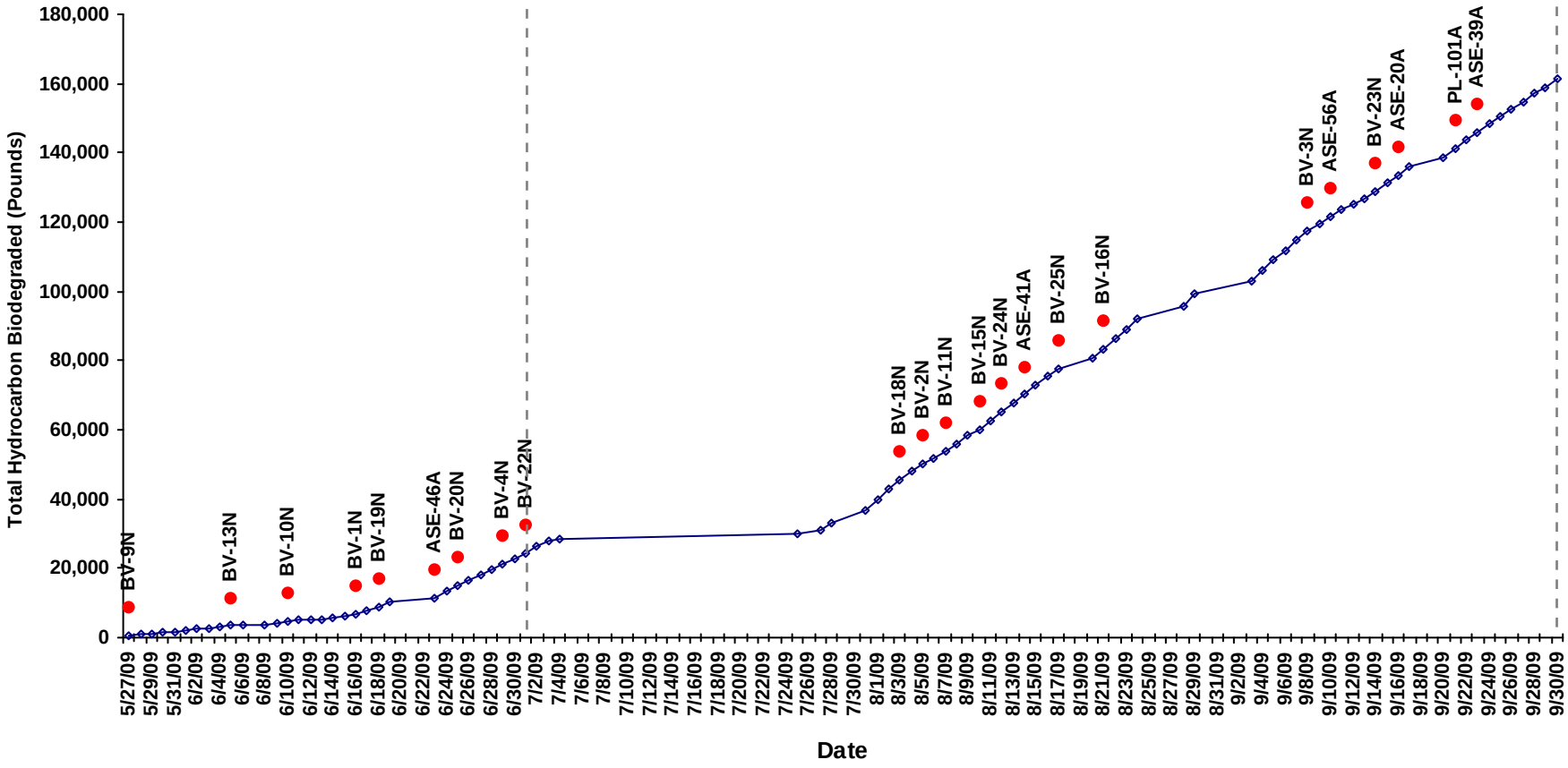
0 150 300 600 Feet

Notes:
1. UST = Underground Storage Tank
2. BSVE = Biologically-enhanced Soil-vapor Extraction

FIGURE 1-3
UNDERGROUND STORAGE TANK GROUNDWATER MONITORING WELL NETWORK
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG1-3_UST_MONITORING_WELL_NETWORK.MXD TWONG2 10/20/2009 15:30:55



Legend

Total Biodegraded — Indicates when extraction wells were brought online

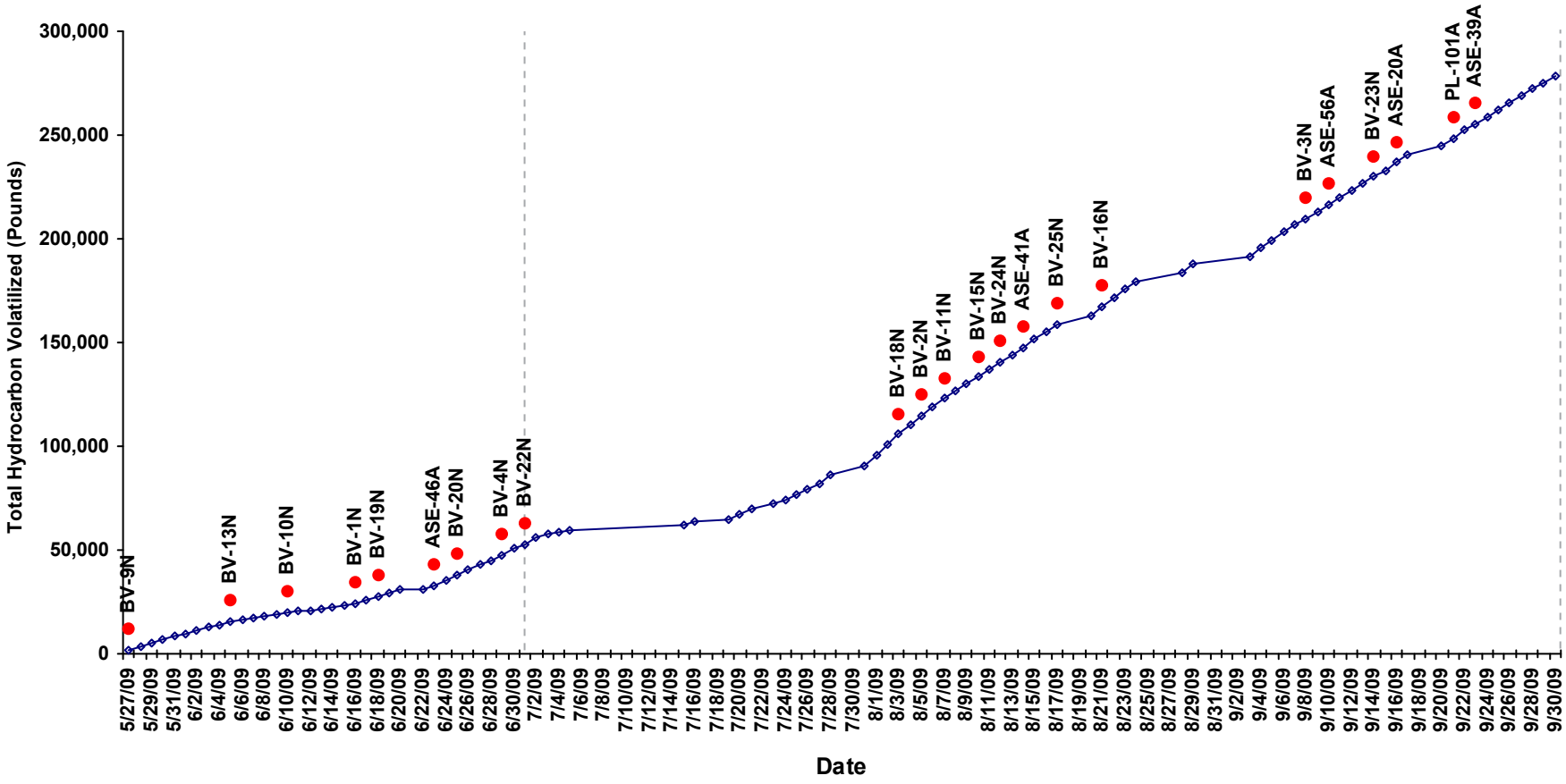
Designates quarterly reporting period

FIGURE 2-1

CUMULATIVE MASS REMOVAL BY BIODEGRADATION

Honeywell 34th Street Facility, Phoenix, Arizona

CH2MHILL



Legend

Total Volatilized

Indicates when extraction wells were brought online

Designates quarterly reporting period

Note:

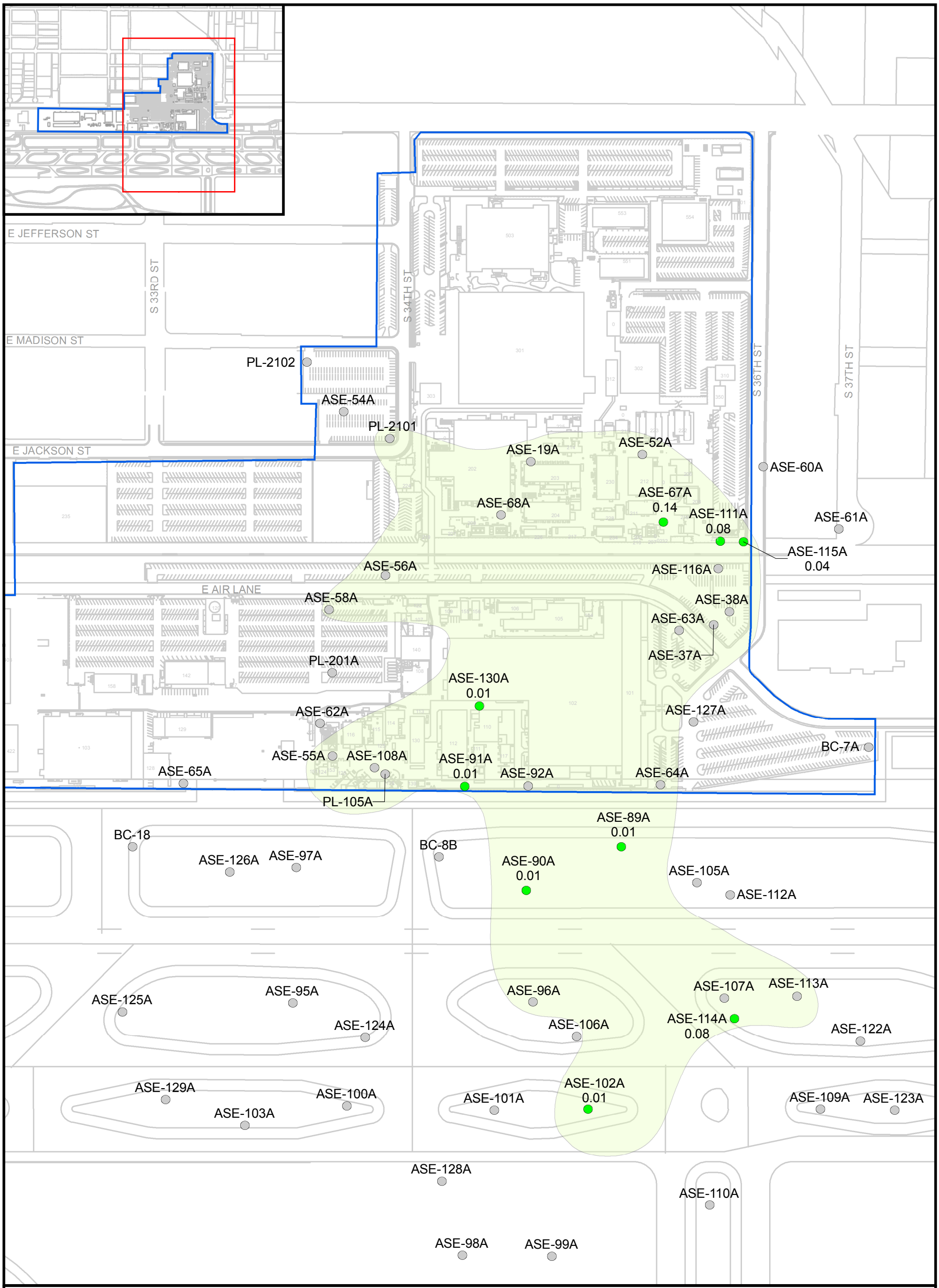
1. BTU = British thermal unit

FIGURE 2-2

CUMULATIVE MASS REMOVAL BY VOLATILIZATION BASED ON BTU CONSUMPTION

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL



Legend

- Free Product Detected (thickness provided in feet)
- Free Product Not Detected
- Street and Airport Features
- Honeywell Facility
- Historical Free-Product Extent (as of September 30, 2009)

N
W E
S

0 150 300 600 Feet

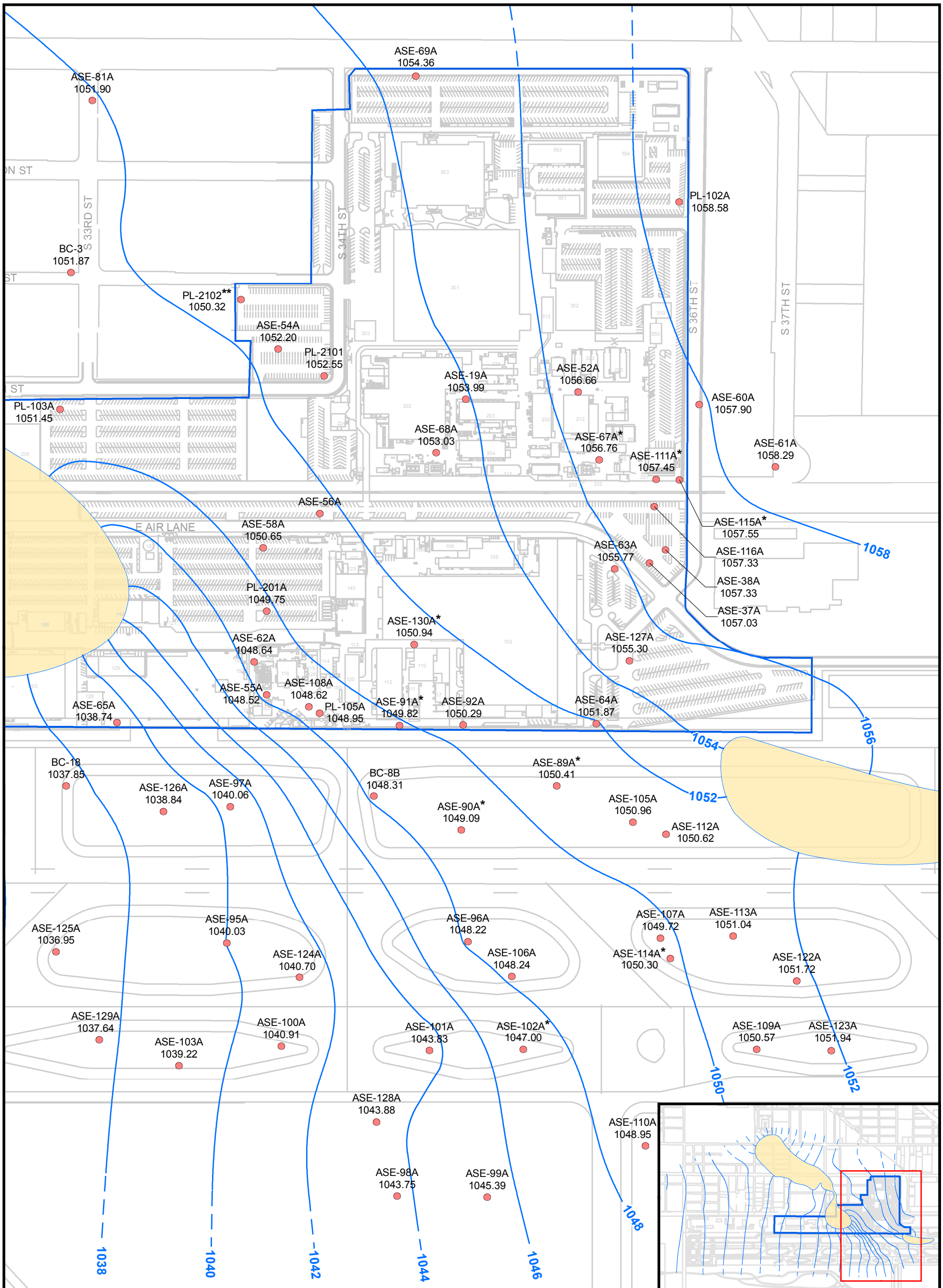
Note:
All measurements recorded on September 3, 2009.

FIGURE 3-1
FREE-PRODUCT THICKNESS
SEPTEMBER 2009

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG3-1_FREEPRODUCTTHICKNESS-SEPT2009.MXD TWONG2 11/9/2009 09:39:21



Legend

ASE-128A 1043.88 — Well Identifier; Water-level Elevation, in feet above mean sea level

Water-level Contours (ft amsl)

Honeywell Facility

Honeywell Bedrock Rise

N W E S

0 150 300 600 Feet

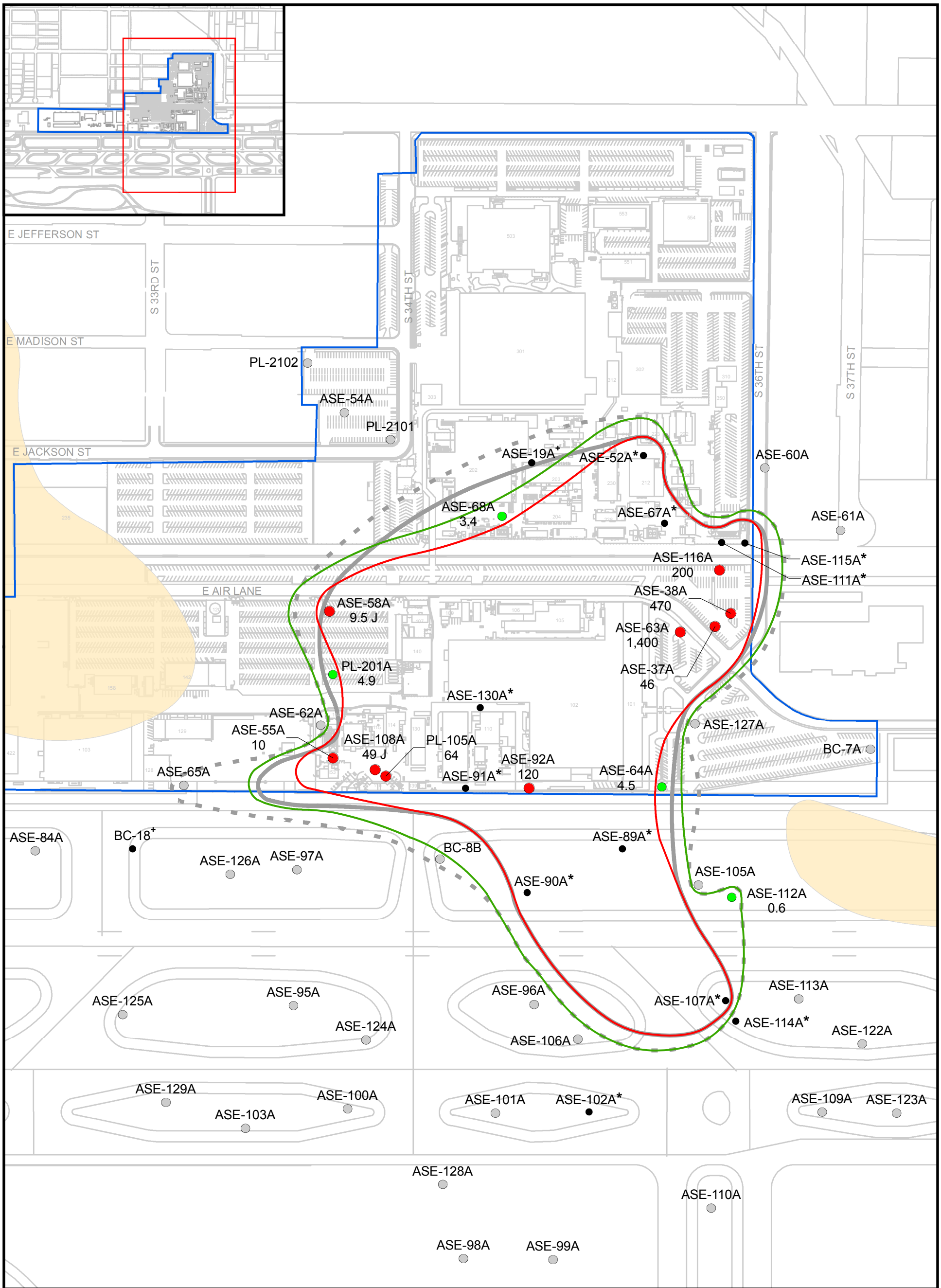
Notes:
1. All measurements recorded on September 3, 2009.
2. * Monitoring well contained free product. Value represents corrected water-level elevation based on a free-product specific gravity of 0.81. Value not used to produce contours.
3. ** Indicates an anomalous data point. Value not used to produce contours.

FIGURE 3-2
WATER-LEVEL CONTOURS
SEPTEMBER 2009
SUB-UNIT A

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG3-2_WATER-LEVELCONTOURS-SEPT2009-SRG.MXD TWONG2 10/20/2009 15:41:51



Legend

- Compound Not Detected
- Compound Detected (µg/L)
- Regulatory Standard Exceeded
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility
- Honeywell Bedrock Rise

September 2009

- Not Detected Above Reporting Limit
- 5 µg/L

June 2009

- Not Detected Above Reporting Limit
- 5 µg/L

N W E S

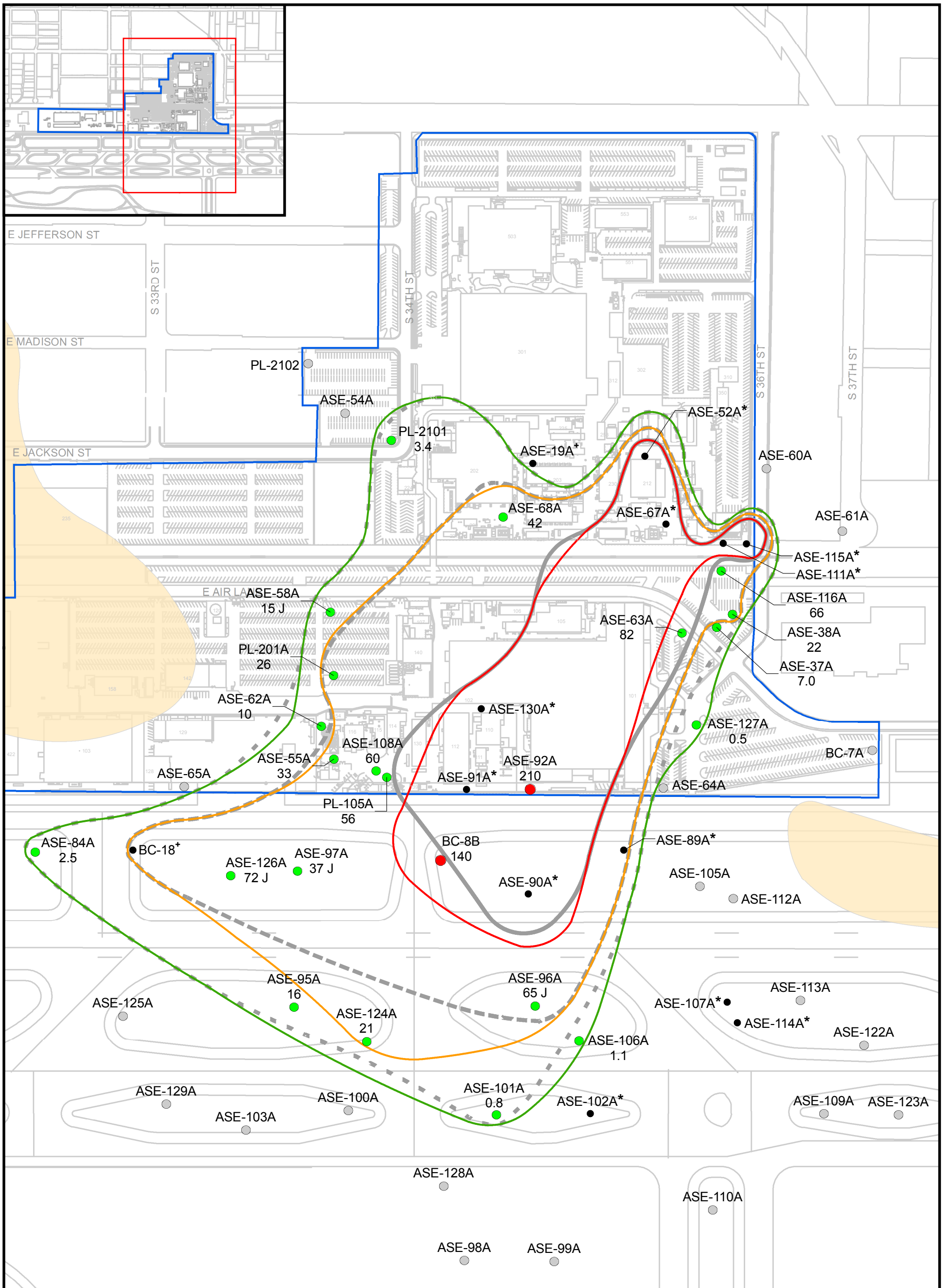
0 150 300 600 Feet

Notes:
1. µg/L = micrograms per liter
2. Exceedance value is 5 µg/L.
3. Samples collected between September 8, 2009 and September 18, 2009.
4. J = Analyte detected, but concentration estimated by laboratory.
5. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
6. + Indicates monitoring well not sampled due to insufficient water in well.

FIGURE 3-3
BENZENE
SEPTEMBER 2009
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG3-3_GW_BENZENE-SEPT2009.MXD TWONG2 11/3/2009 17:39:52



Legend

- Compound Not Detected
- Compound Detected (µg/L)
- Regulatory Guidance Level Exceeded
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility
- Honeywell Bedrock Rise

September 2009

- Not Detected Above Reporting Limit
- 20 µg/L
- 94 µg/L

June 2009

- Not Detected Above Reporting Limit
- 20 µg/L
- 94 µg/L

N W E S

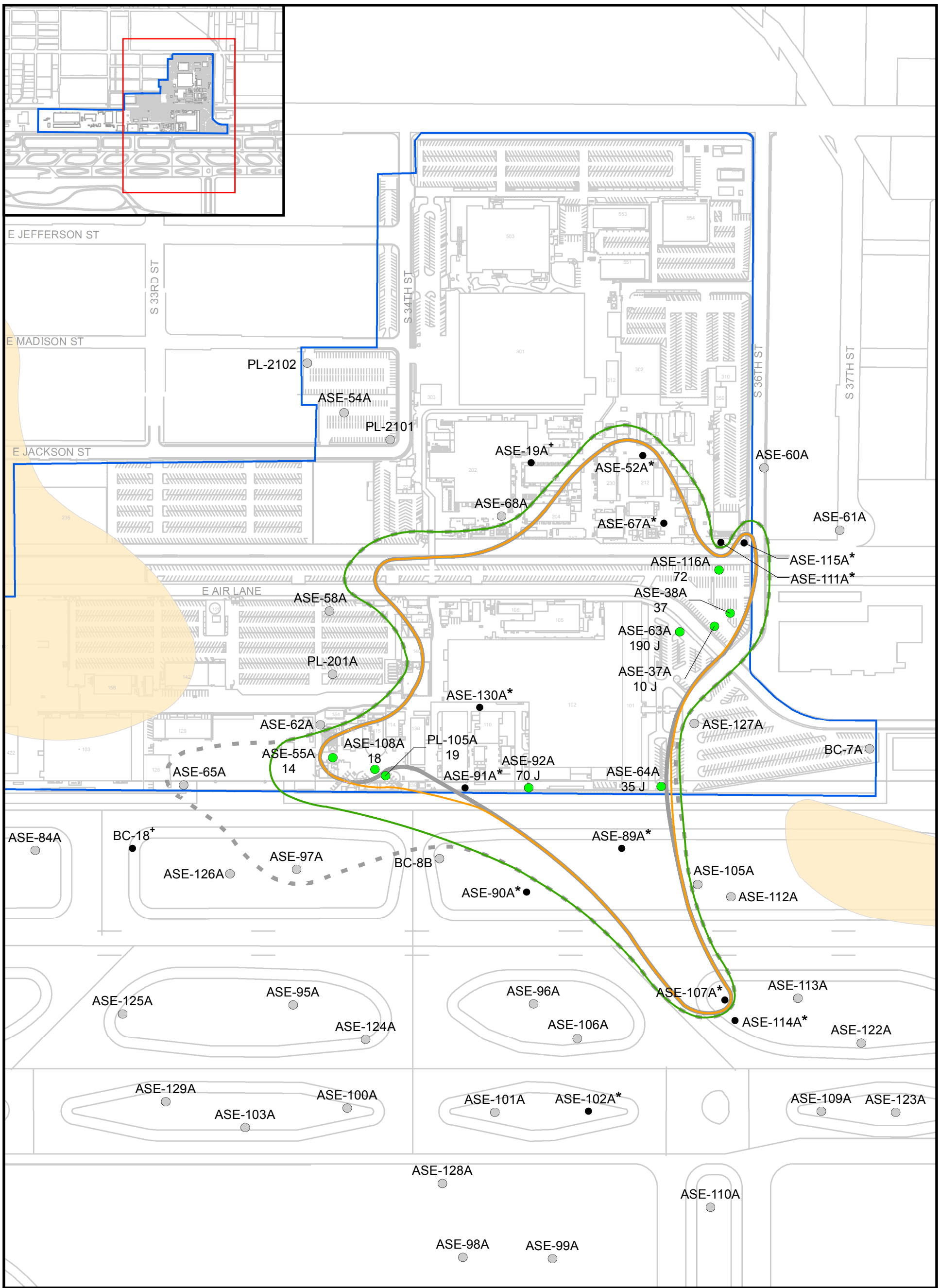
0 150 300 600 Feet

Notes:
1. µg/L = micrograms per liter
2. Exceedance value is 94 µg/L.
3. The Arizona Department of Environmental Quality Investigative Level is 20 µg/L.
4. Samples collected between September 8, 2009 and September 18, 2009.
5. J = Analyte detected, but concentration estimated by laboratory.
6. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
7. + Indicates monitoring well not sampled due to insufficient water in well.

FIGURE 3-4
METHYL TERT-BUTYL ETHER
SEPTEMBER 2009
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG3-4_GW_MTBE-SEPT2009.MXD TWONG2 11/3/2009 17:59:30



Legend

- Compound Not Detected
- Compound Detected (µg/L)
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility
- Honeywell Bedrock Rise

September 2009

- Not Detected Above Reporting Limit
- 6.5 µg/L

June 2009

- Not Detected Above Reporting Limit
- 6.5 µg/L

N W E S

0 150 300 600 Feet

Notes:

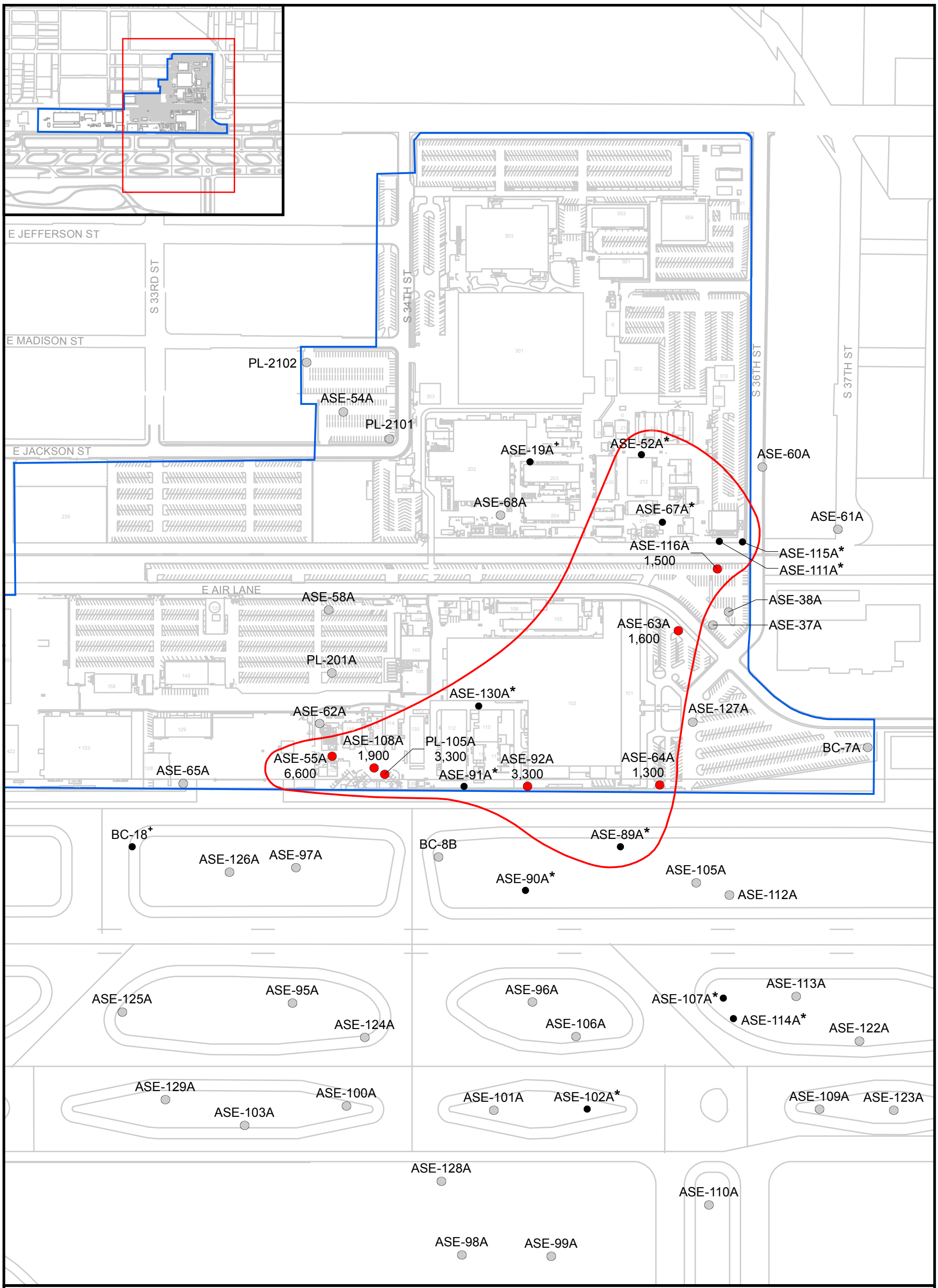
1. µg/L = micrograms per liter
2. Exceedance value is 280 µg/L.
3. The Arizona Department of Environmental Quality Tier 1 Corrective Action Standard is 6.5 µg/L.
4. Samples collected between September 8, 2009 and September 18, 2009.
5. J = Analyte detected, but concentration estimated by laboratory.
6. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
7. + Indicates monitoring well not sampled due to insufficient water in well.

FIGURE 3-5
NAPHTHALENE
SEPTEMBER 2009
GROUNDWATER PARAMETERS

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG3-5_GW_NAPHTHALENE-SEPT2009.MXD TWONG2 11/3/2009 17:58:32



Legend

- Compound Not Detected
- Exceeded 1,000 µg/L
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility

September 2009

- 1,000 µg/L

N W E S

0 150 300 600 Feet

Notes:
1. µg/L = micrograms per liter
2. Value posted is the sum of C10 through C32 compounds.
3. Samples collected between September 8, 2009 and September 18, 2009.
4. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
5. + Indicates monitoring well not sampled due to insufficient water in well.
6. Wells not sampled due to the presence of free product were included within the 1,000 µg/L contour if when last sampled their concentrations exceeded 1,000 µg/L.

FIGURE 3-6
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS SEPTEMBER 2009 GROUNDWATER PARAMETERS

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIG3-6_GW_TRPH-SEPT2009.MXD TWONG2 11/23/2009 15:18:54

Appendix A
Status of Deliverables

APPENDIX A

Status of Deliverables

The following is a list of deliverables submitted through Third Quarter 2009 since the Site Characterization Report, dated August 23, 2002, was submitted to ADEQ:

- On September 18, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a copy of MCAQD's approval letters for the four BSVE performance test protocols (dated August 20, 2009) and the Response to Comments on Test Plans for Performance Testing and 14-day notification letter that was submitted to MCAQD on September 11, 2009.
- On August 31, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20*.
- On July 23, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a copy of the four BSVE performance test protocols that were submitted to MCAQD on July 21, 2009.
- On May 28, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2009, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20*.
- On May 12, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Operation and Maintenance Plan for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15-.17*.
- On February 27, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20*.
- On February 10, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Response to January 6, 2009 Comments on the Operation and Maintenance Manual for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, LUST File #0393.02-.10, .15-.20*.
- On December 19, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Baseline Soil Vapor Sampling Report, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.20*.
- On December 1, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17*.
- On November 20, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the draft *Startup Plan for the Biologically Enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility*.

- On November 7, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Final *Biologically-enhanced Soil Vapor Extraction System Operations and Maintenance Plan, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On October 24, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Baseline Soil Vapor Sampling Report, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On October 3, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Groundwater Sampling and Free-product Monitoring and Recovery Plan, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On September 26, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a technical memorandum titled, *Investigation of Concrete Conduit Encountered During BSVE Construction, Honeywell 34th Street Facility, Phoenix, Arizona*.
- On August 26, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On June 17, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Honeywell 34th Street Facility, BSVE North of Runway 8-26 Phase Design Basis Report (PSHIA side), Facility ID #0-002227, LUST File #0393.02.-10, .15-.17.*
- On May 23, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On April 18, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ an update to the *Non-Process Soil Vapor Monitoring Program, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On February 26, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On February 20, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Biologically-Enhanced Soil Vapor Extraction Underground Process Pipeline Installation – Soil Observation Plan*.
- On February 19, 2008, Honeywell submitted a letter to ADEQ requesting approval for modification to the approved CAP to revise the BSVE remediation project schedule based on receipt of Maricopa County's approval of Honeywell's air permit modification.
- On November 21, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On August 22, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*

- On August 17, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Non-Process Soil Vapor Monitoring Program, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On August 17, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a courtesy copy of the revised BSVE design package that was submitted to the COP Development Services Department on August 9, 2007 and the Aviation Department's Tenant Improvement group on August 10, 2007. This package was composed of design drawings, specifications, and a Tenant Improvement Plan.
- On May 23, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On May 15, 2007, Honeywell submitted to ADEQ a technical memorandum titled, *Evaluation of Well Dilution Effects, Honeywell 34th Street Facility and Phoenix Sky Harbor International Airport, Phoenix, Arizona.*
- On April 30, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a courtesy copy of the BSVE design package that was submitted to the COP Development Services Department and the Aviation Department's Tenant Improvement group. This package was composed of design drawings, specifications, and a Tenant Improvement Plan.
- On March 19, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Biologically Enhanced SVE with Product Recovery System Design Basis Report Honeywell International 34th Street Facility*, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.
- On February 27, 2007, Honeywell submitted a letter to ADEQ requesting approval for modification to the approved CAP to reflect delays in obtaining the BSVE air permit and adjust the frequency of manual free-product monitoring and recovery.
- On February 27, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On November 29, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On November 29, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Field Sampling Plan for PSHIA Subsurface Utility Vaults for Baseline Air Sampling Using EPA Method TO-15, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On October 20, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Air Injection Pilot Test Report Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*

- On September 15, 2006, Honeywell submitted a letter to ADEQ proposing to modify the scheduled submittal dates of quarterly status reports such that future reports are submitted to ADEQ no later than 60 days following the end of each calendar quarter.
- On August 3, 2006, Honeywell submitted to ADEQ a letter "Modification to Final Air Injection Pilot Test Work Plan, dated October 4, 2005," that explained the method for conducting a short-term pilot test and the plan for implementation on PSHIA Property.
- On July 20, 2006, Honeywell submitted to ADEQ a letter that explained the status of the pilot test, Honeywell's agreement with the City of Phoenix to evaluate the BSVE design (assuming 8-percent oxygen utilization rate) and the status of the air permit applications.
- On July 14, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On April 14, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On March 2, 2006, Honeywell submitted to ADEQ the *Proposed Modification to Honeywell's Groundwater Sampling, Free Product Monitoring and Recovery Plan – Total Recoverable Petroleum Hydrocarbons Analytical Method, LUST File #0393.02-.10, .15, Facility ID #0-002227.*
- On January 16, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Quarterly Status Report, Quarter 1 (October 17, 2005 to January 15, 2006), Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15.*
- On January 13, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Soil Vapor Field Sampling Report, Honeywell 34th Street Facility, 111 S. 34th Street, Phoenix, Arizona.*
- On December 9, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *LUST Field Sampling Plan – Groundwater Sampling, Free Product Monitoring and Recovery Plan*.
- On December 7, 2005, CH2M HILL, on behalf of Honeywell, submitted to Maricopa County (1) the Revised Air Permit Application for BSVE and (2) the Air Permitting Evaluation for Air Injection Pilot Study. On December 19, 2005, copies of the Revised Air Permit Application for BSVE were sent to ADEQ, City of Phoenix Aviation Department, and USEPA.
- On November 17, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's LUST Enforcement Unit a letter that explained the reasons for the differences in the timeline for "Startup and Initial Testing" presented in the revised schedule (Revised Figure 32, attachment to the November 2, 2005 letter) and the original schedule in the CAP.

- On November 2, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's LUST Enforcement Unit a letter that provided a status update on several aspects of the CAP implementation and on the conditions established in ADEQ's October 7, 2005 CAP approval letter. Attachments to this letter included: (1) revised Figure 32—Remedial Alternative 3 Implementation Schedule, (2) free-product thickness map, October 2005, (3) list of site characterization activities since submittal of the *Site Characterization Report*, (4) updated site characterization figures and tables, (5) boring logs, and (6) a compact disc containing analytical and monitoring well measurement data.
- On October 20, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Additional Characterization of LUST File #0393.15 – JP-4 Fuel Pipeline Release at the Honeywell 34th Street Facility*.
- On October 4, 2005, Honeywell submitted to ADEQ the *Final Air Injection Pilot Test Work Plan, Honeywell 34th Street Facility and Phoenix Sky Harbor International Airport North Airfield, Phoenix, Arizona*.
- On September 19, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Quality Assurance Project Plan, Honeywell 34th Street Facility.*
- On September 7, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Phase III Monitoring Well Installation on Honeywell Leasehold and Phoenix Sky Harbor International Airport, Honeywell 34th Street Facility*.
- On August 22, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Installation of Multi Level Soil Vapor Monitoring Wells and Shallow/Sub-slab Soil Vapor Monitoring Points, Honeywell 34th Street Facility*.
- On July 11, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Soil Vapor Baseline Sampling and Analysis Plan, Honeywell 34th Street Facility.*
- On July 1, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *Free Product Report – LUST File #0393.15 – JP-4 Fuel Line from UST #203.*
- On June 13, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *Initial Site Characterization Report – LUST File #0393.15 – JP-4 Fuel Line from UST #203*.
- On March 29, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *14-day Report – LUST File #0393.15 – JP-4 Fuel Line from UST #203.*
- On November 15, 2004, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's UST Corrective Action Section responses to ADEQ's September 30, 2004 comments on Honeywell's July 30, 2004 *Revised Corrective Action Plan.* The corresponding replacement pages of the revised text, tables, and figures of the Revised CAP were also submitted.
- On July 30, 2004, CH2M HILL, on behalf of Honeywell, submitted the *Revised Corrective Action Plan* to ADEQ's UST Corrective Action Section. The revised CAP supersedes and replaces the original July 18, 2003, CAP.
- On May 27, 2004, Honeywell submitted a three-ring binder to ADEQ's UST Corrective Action Section titled *Supporting Material, UST Informal Settlement Conference, May 28, 2004*.

- On May 7, 2003, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a technical memorandum titled *Summary of Results from the Bioventing/SVE Pilot Study February 24 through March 1, 2003*.
- On May 1, 2003, Honeywell submitted to ADEQ's UST Corrective Action Section the *Free-product Report, Honeywell International Inc., 34th Street Facility, Phoenix, Arizona, Facility ID# 0-002227, LUST File Nos. 0393.02 -.10*.
- On December 18, 2002, Honeywell submitted to ADEQ's UST Corrective Action Section *Supplemental Site Characterization Information for the Honeywell International Inc., 34th Street Facility, Phoenix, Arizona, Facility ID# 0-002227, LUST File Nos. 0393.02 -.10*.
- On August 23, 2002, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's UST Corrective Action Section the *Site Characterization Report.*

Appendix B
Data Quality Evaluation and Laboratory Analytical Reports - Soil-vapor

APPENDIX B

Data Quality Evaluation Report – Third Quarter 2009 Soil-vapor Monitoring

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for soil-vapor samples collected at the Honeywell 34th Street facility (Honeywell facility). Samples were collected and analyzed to support performance evaluation of the biologically-enhanced soil vapor extraction (BSVE) system. The data may also be used to support future activities such as feasibility studies, risk assessments, fate and transport modeling and remedial actions. The basis for this assessment includes: individual method requirements, guidelines from the United States Environmental Protection Agency (USEPA) *Contract Laboratory National Functional Guidelines for Organic Data Review* (USEPA, 1999), and the *Honeywell International Inc., Sky Harbor 34th Street Facility Quality Assurance Project Plan* (QAPP) (CH2M HILL, 2005 and Honeywell, 2006). This DQE report is intended as a general data quality assessment designed to summarize data issues.

The Third Quarter 2009 soil-vapor sampling event was conducted in compliance with the updated QAPP entitled *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* which Honeywell submitted to the Arizona Department of Environmental Quality (ADEQ) on September 20, 2007 (CH2M HILL, 2007). Honeywell is currently awaiting ADEQ's approval of this document. A QAPP addendum entitled *Quality Assurance Project Plan, Addendum 1, Honeywell 34th Street Facility Phoenix, Arizona* (CH2M HILL, 2009) was submitted to ADEQ for approval on April 30, 2009 and addresses the methods in this DQE.

Analytical Data

This DQE report covers 88 normal samples and 8 field duplicates. A list of samples and collection dates is included in Attachment 1 at the end of this report. Samples were collected between September 2 and September 15, 2009. These sample results were reported as nine sample delivery groups (SDG) listed in Table 1. The analyses were performed by Curtis & Tompkins Laboratory in Berkeley, California.

Table 1 – SDGs
214751
214752
214807
214891
214897
214899
214904

Table 1 – SDGs
214999
215048

Three methods were used to analyze the environmental samples. Samples were collected and shipped by overnight carrier to the laboratory for analysis. Samples were analyzed for one or more of the following analytes/methods:

Table 2 – Analytical Parameters	
Parameter	**Method**
Volatile Organic Compounds	TO-15
Total Petroleum Hydrocarbon Speciation	TO-3M
Carbon Dioxide and Oxygen	ASTM D1946

Data validation was performed in accordance with the *Contract Laboratory National Functional Guidelines for Organic Data Review* (USEPA, 1999), substituting the calibration and quality control requirements specified in the Honeywell QAPP (CH2M HILL, 2005 and Honeywell, 2006; CH2M HILL, 2007) and QAPP Addendum (CH2M HILL, 2009) for those specified in the National Functional Guidelines.

The assessment of data includes a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required field and laboratory quality control samples; (4) flagging for method blanks; (5) laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries; (6) surrogate spike recoveries, (7) internal standard recoveries; and, (8) initial and continuing calibrations.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of field duplicates.

Data flags are assigned according to the Honeywell QAPP (CH2M HILL, 2005 and Honeywell, 2006; CH2M HILL, 2007) and QAPP Addendum (CH2M HILL, 2009). These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes matrix and blank sample impacts.

The data flags are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = The result was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.

- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Table 5 at the end of this DQE. Both the text section and Table 5 contain only the instances where criteria exceedances impact data qualification (resulting in a validation flag being added to the data).

Holding Times

All holding-time criteria were met.

Sample Quantitation

Data were reported to the reporting limit (RL).Several samples required dilution due to high analyte concentrations and/or matrix interference. The RLs for non-detected analytes in the diluted samples were raised accordingly. Table 3 lists the method and samples analyzed at a dilution.

Table 3 – Samples Analyzed Diluted

Method	Sample ID	Dilution Factor (s)
TO-15	ASE-124A-9Q3	4.04
TO-15	ASE-54A-9Q3	132.6
TO-15	ASE-60A-9Q3	129.6
TO-15	ASE-61A-9Q3	26.64, 44.4
TO-15	BC-7A-9Q3	13.8
TO-15	BSVE-SVM-9Q3-006	26.64, 88.8
TO-15	BSVE-SVM-9Q3-008	26.64
TO-15	P-30-L-9Q3	12.96
TO-15	P-30-M-9Q3	85.2
TO-15	P-47-9Q3	4.24
TO-15	PL-102A-9Q3	6.27
TO-15	PL-2102-9Q3	42.2
TO-15	SMW-1-L-9Q3	166.8
TO-15	SMW-2-M-9Q3	9.33
TO-15	SMW-3-U-9Q3	4.86
TO-15	SMW-4-L-9Q3	26.52
TO-15	SMW-4-M-9Q3	13.8, 27.6
TO-15	SMW-4-U-9Q3	13.14
TO-15	SMW-5-M-9Q3	12.48
TO-15	SMW-5-U-9Q3	9.09
TO-15	SMW-6-L-9Q3	6.12
TO-15	SMW-7-L-9Q3	12.72

Dilution factors less than four are the result of canister pressure and are not related to analyte concentrations or matrix interference and therefore are not listed in Table 3.

Calibration

All initial and continuing calibration criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination.

Field Blanks

Field blanks were not collected with this event.

Field Duplicates

Eight field duplicate sets were collected and analyzed with this event. A list of field duplicates and associated parent sample identifications (ID) is included in Table 4.

Table 4 – List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
BSVE-SVM-9Q3-001	PMW-3-M-9Q3
BSVE-SVM-9Q3-002	PMW-9-M-9Q3
BSVE-SVM-9Q3-003	SMW-8-M-9Q3
BSVE-SVM-9Q3-004	SMW-13-L-9Q3
BSVE-SVM-9Q3-005	SMW-11-U-9Q3
BSVE-SVM-9Q3-006	ASE-61A-9Q3
BSVE-SVM-9Q3-007	SMW-3-L-9Q3
BSVE-SVM-9Q3-008	SMW-4-L-9Q3

All relative percent difference (RPD) criteria were met with the following exceptions:

The RPDs of C5-C6 as n-hexane and C6+ as n-hexane were above the acceptance criteria in field duplicate set PMW-9-M-9Q3/BSVE-SVM-9Q3-002 for Method TO-3M. Two detected results for the normal sample were qualified as estimated and flagged “J”; two non-detected results for the field duplicate sample were qualified as estimated and flagged “UJ”.

The RPDs of 12 analytes were above the acceptance criteria in one or more of six field duplicate sets for Method TO-15. Forty detected results in the normals and field duplicates were qualified as estimated and flagged “J”; 10 non-detected results in the normals and field duplicates were qualified as estimated and flagged “UJ”. These qualified results are presented in more detail in Table 5.

Surrogates

All surrogates recovery criteria were met with the following exceptions:

Surrogate recoveries were above the upper control limits in samples P-30-M-9Q3 and PL-2102-9Q3 for Method TO-15, indicating associated sample results are possibly biased high.

Thirteen associated detected results were qualified as estimated and flagged "J". These qualified results are presented in more detail in Table 5.

Surrogate recoveries were below above the lower control limits in sample ASE-60A-9Q3 for Method TO-15, indicating associated sample results are possibly biased low. Five associated detected results were qualified as estimated and flagged "J"; 23 associated non-detected results were qualified as estimated and flagged "UJ". These qualified results are presented in more detail in Table 5.

Laboratory Control Samples

LCS/LCSDs were analyzed as required. Precision and accuracy criteria were met.

Internal Standards

All internal standard criteria were met.

Tentatively Identified Compounds

Tentatively identified compounds were not reported by the laboratory.

Chain of Custody

Each sample was documented in a completed chain-of-custody and received at the laboratory in good condition.

Overall Assessment

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The procedures for assessing the precision, accuracy, representativeness, completeness, and comparability parameters were based on the Honeywell QAPP. The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for the above-defined events:

1. No data were rejected and completeness was 100 percent for all method/analyte combinations.
2. No data were qualified due to low-level blank contamination.
3. Samples were analyzed diluted resulting in raised RLs for non-detected analytes.
4. Field duplicate RPD exceedances were observed for Methods TO-3M and TO-15; 54 results were qualified as estimated.
5. Surrogate recovery exceedances were observed in three samples for Method TO-15; 41 results were qualified as estimated. These surrogate recovery exceedances are likely due to matrix interference.
6. Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives.

References

CH2M HILL. 2005. *Honeywell International Inc., Sky Harbor 34th Street Facility, 111 South 34th Street, Phoenix, Arizona; Quality Assurance Project Plan.* September.

_____. 2007. *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona*. September 20.

_____. 2009. *Quality Assurance Project Plan, Addendum 1, Honeywell 34th Street Facility Phoenix, Arizona.* April 30.

Honeywell International, Inc. 2006. *Response to Comments on the Quality Assurance Project Plan dated September 2005; Honeywell International Inc. Sky Harbor 34th Street Facility*. July 13.

United States Environmental Protection Agency (USEPA). 1999. *Contract Laboratory National Functional Guidelines for Organic Data Review.* October.

Table 5 – Validation Findings

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
TO-15	ASE-60A-9Q3	1,1,1-Trichloroethane	350	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	1,1-Dichloroethane	260	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	1,1-Dichloroethene	260	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	1,2,4-Trimethylbenzene	2500	ug/m^3	J	SSL
TO-15	ASE-60A-9Q3	1,2-Dichloroethane	260	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	1,3,5-Trimethylbenzene	320	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	1,4-Dichlorobenzene	390	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	1,4-Dioxane	230	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Benzene	210	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Carbon Tetrachloride	410	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Chloroethane	170	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Chloroform	320	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	cis-1,2-Dichloroethene	1300	ug/m^3	J	SSL
TO-15	ASE-60A-9Q3	Ethylbenzene	640	ug/m^3	J	SSL
TO-15	ASE-60A-9Q3	Freon 113	500	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Freon 12	320	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	m,p-Xylenes	280	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Methylene Chloride	230	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	MTBE	230	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	n-Hexane	1500	ug/m^3	J	SSL
TO-15	ASE-60A-9Q3	o-Xylene	280	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Tetrachloroethene	440	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Toluene	240	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	trans-1,2-Dichloroethene	260	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Trichloroethene	410	ug/m^3	J	SSL
TO-15	ASE-60A-9Q3	Trichlorofluoromethane	360	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Vinyl Chloride	170	ug/m^3	UJ	SSL
TO-15	ASE-60A-9Q3	Xylene (total)	560	ug/m^3	UJ	SSL
TO-15	ASE-61A-9Q3	1,2,4-Trimethylbenzene	470	ug/m^3	J	FD
TO-15	ASE-61A-9Q3	1,3,5-Trimethylbenzene	130	ug/m^3	J	FD
TO-15	ASE-61A-9Q3	Chloroform	110	ug/m^3	J	FD
TO-15	ASE-61A-9Q3	n-Hexane	97	ug/m^3	J	FD
TO-15	ASE-61A-9Q3	Tetrachloroethene	810	ug/m^3	J	FD
TO-15	ASE-61A-9Q3	Trichloroethene	6800	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-001	1,2,4-Trimethylbenzene	37	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-001	1,3,5-Trimethylbenzene	16	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-001	Benzene	86	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-001	m,p-Xylenes	60	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-001	n-Hexane	640	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-001	Xylene (total)	60	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-002	Trichloroethene	5.7	ug/m^3	UJ	FD
TO-15	BSVE-SVM-9Q3-003	1,1-Dichloroethane	4.1	ug/m^3	UJ	FD
TO-15	BSVE-SVM-9Q3-003	1,1-Dichloroethene	4	ug/m^3	UJ	FD
TO-15	BSVE-SVM-9Q3-003	1,2,4-Trimethylbenzene	140	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-003	1,3,5-Trimethylbenzene	28	ug/m^3	J	FD

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
TO-15	BSVE-SVM-9Q3-003	Benzene	25	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-003	Ethylbenzene	42	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-003	m,p-Xylenes	25	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-003	n-Hexane	21	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-003	Xylene (total)	25	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-004	1,3,5-Trimethylbenzene	18	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-006	1,2,4-Trimethylbenzene	660	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-006	1,3,5-Trimethylbenzene	180	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-006	Chloroform	170	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-006	n-Hexane	47	ug/m^3	UJ	FD
TO-15	BSVE-SVM-9Q3-006	Tetrachloroethene	1100	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-006	Trichloroethene	9700	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-008	1,3,5-Trimethylbenzene	100	ug/m^3	J	FD
TO-15	BSVE-SVM-9Q3-008	Ethylbenzene	72	ug/m^3	J	FD
TO-15	P-30-M-9Q3	Benzene	420	ug/m^3	J	SSH
TO-15	P-30-M-9Q3	Ethylbenzene	16000	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	1,1-Dichloroethane	2900	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	1,2,4-Trimethylbenzene	1400	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	1,3,5-Trimethylbenzene	170	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	Benzene	440	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	Chloroethane	200	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	Ethylbenzene	1900	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	m,p-Xylenes	820	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	MTBE	120	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	n-Hexane	9000	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	Vinyl Chloride	1200	ug/m^3	J	SSH
TO-15	PL-2102-9Q3	Xylene (total)	820	ug/m^3	J	SSH
TO-15	PMW-3-M-9Q3	1,2,4-Trimethylbenzene	5.5	ug/m^3	UJ	FD
TO-15	PMW-3-M-9Q3	1,3,5-Trimethylbenzene	5.5	ug/m^3	UJ	FD
TO-15	PMW-3-M-9Q3	Benzene	3.5	ug/m^3	UJ	FD
TO-15	PMW-3-M-9Q3	m,p-Xylenes	4.8	ug/m^3	UJ	FD
TO-15	PMW-3-M-9Q3	n-Hexane	3.9	ug/m^3	UJ	FD
TO-15	PMW-3-M-9Q3	Xylene (total)	9.6	ug/m^3	UJ	FD
TO-15	PMW-9-M-9Q3	Trichloroethene	11	ug/m^3	J	FD
TO-15	SMW-13-L-9Q3	1,3,5-Trimethylbenzene	25	ug/m^3	J	FD
TO-15	SMW-4-L-9Q3	1,3,5-Trimethylbenzene	140	ug/m^3	J	FD
TO-15	SMW-4-L-9Q3	Ethylbenzene	110	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	1,1-Dichloroethane	430	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	1,1-Dichloroethene	240	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	1,2,4-Trimethylbenzene	55	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	1,3,5-Trimethylbenzene	11	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	Benzene	9.6	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	Ethylbenzene	16	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	m,p-Xylenes	9.6	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	n-Hexane	7	ug/m^3	J	FD
TO-15	SMW-8-M-9Q3	Xylene (total)	9.6	ug/m^3	J	FD

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
TO-3M	BSVE-SVM-9Q3-002	C5-C6 as n-Hexane	7.4	ug/L	UJ	FD
TO-3M	BSVE-SVM-9Q3-002	C6+ as n-Hexane	7.4	ug/L	UJ	FD
TO-3M	PMW-9-M-9Q3	C5-C6 as n-Hexane	48	ug/L	J	FD
TO-3M	PMW-9-M-9Q3	C6+ as n-Hexane	150	ug/L	J	FD

Notes:

FD = Field duplicate relative percent difference criterion exceeded
MTBE = Methyl tert-butyl ether
SSH = Surrogate recovery greater than the upper control limit
SSL = Surrogate recovery less than the lower control limit
ug/L = Micrograms per liter
ug/m^3 = Micrograms per cubic meter

Attachment 1

Samples Associated with DQE		
Field Sample ID	**Sample Date**	**Sample Purpose**
BSVE-SVM-9Q3-004	09/03/2009	FD
BSVE-SVM-9Q3-005	09/03/2009	FD
BSVE-SVM-9Q3-003	09/03/2009	FD
BSVE-SVM-9Q3-001	09/03/2009	FD
BSVE-SVM-9Q3-007	09/07/2009	FD
BSVE-SVM-9Q3-008	09/12/2009	FD
BSVE-SVM-9Q3-006	09/14/2009	FD
BSVE-SVM-9Q3-002	09/14/2009	FD
ASE-125A-9Q3	09/02/2009	REG
ASE-128A-9Q3	09/02/2009	REG
BC-18-9Q3	09/02/2009	REG
SMW-13-U-9Q3	09/02/2009	REG
PMW-6-U-9Q3	09/02/2009	REG
PMW-6-M-9Q3	09/02/2009	REG
SMW-10-U-9Q3	09/02/2009	REG
SMW-10-L-9Q3	09/02/2009	REG
SMW-10-M-9Q3	09/02/2009	REG
SMW-12-M-9Q3	09/03/2009	REG
SMW-11-U-9Q3	09/03/2009	REG
SMW-11-M-9Q3	09/03/2009	REG
SMW-11-L-9Q3	09/03/2009	REG
SMW-12-U-9Q3	09/03/2009	REG
ASE-122A-9Q3	09/03/2009	REG
PMW-3-M-9Q3	09/03/2009	REG
PMW-7-U-9Q3	09/03/2009	REG
PMW-2-M-9Q3	09/03/2009	REG
PMW-7-M-9Q3	09/03/2009	REG
PMW-2-U-9Q3	09/03/2009	REG
PMW-10-U-9Q3	09/03/2009	REG
SMW-9-M-9Q3	09/03/2009	REG
SMW-9-L-9Q3	09/03/2009	REG
SMW-8-U-9Q3	09/03/2009	REG
SMW-8-M-9Q3	09/03/2009	REG
ASE-123A-9Q3	09/03/2009	REG
SMW-14-M-9Q3	09/03/2009	REG
PMW-10-M-9Q3	09/03/2009	REG
SMW-13-L-9Q3	09/03/2009	REG
PMW-1-M-9Q3	09/03/2009	REG
PMW-1-U-9Q3	09/03/2009	REG
PMW-3-U-9Q3	09/03/2009	REG

Samples Associated with DQE		
Field Sample ID	**Sample Date**	**Sample Purpose**
SMW-14-U-9Q3	09/03/2009	REG
SMW-9-U-9Q3	09/03/2009	REG
SMW-14-L-9Q3	09/03/2009	REG
SMW-13-M-9Q3	09/03/2009	REG
ASE-124A-9Q3	09/03/2009	REG
PMW-4-U-9Q3	09/04/2009	REG
PMW-8-M-9Q3	09/04/2009	REG
PMW-8-U-9Q3	09/04/2009	REG
PMW-4-M-9Q3	09/04/2009	REG
PMW-5-U-9Q3	09/05/2009	REG
PMW-5-M-9Q3	09/05/2009	REG
SMW-1-M-9Q3	09/07/2009	REG
SMW-3-M-9Q3	09/07/2009	REG
SMW-3-L-9Q3	09/07/2009	REG
SMW-3-U-9Q3	09/07/2009	REG
SMW-1-U-9Q3	09/07/2009	REG
SMW-1-L-9Q3	09/07/2009	REG
SMW-6-U-9Q3	09/11/2009	REG
BV-13N-9Q3	09/11/2009	REG
BV-10N-9Q3	09/11/2009	REG
BV-1N-9Q3	09/11/2009	REG
BV-19N-9Q3	09/11/2009	REG
SMW-5-M-9Q3	09/11/2009	REG
SMW-5-U-9Q3	09/11/2009	REG
SMW-6-L-9Q3	09/11/2009	REG
ASE-46A-9Q3	09/11/2009	REG
BV-9N-9Q3	09/11/2009	REG
SMW-7-L-9Q3	09/11/2009	REG
SMW-7-M-9Q3	09/11/2009	REG
SMW-7-U-9Q3	09/11/2009	REG
SMW-6-M-9Q3	09/11/2009	REG
P-28-M-9Q3	09/11/2009	REG
P-28-U-9Q3	09/11/2009	REG
P-28-L-9Q3	09/11/2009	REG
P-46-M-9Q3	09/12/2009	REG
P-47-9Q3	09/12/2009	REG
BV-3N-9Q3	09/12/2009	REG
P-46-U-9Q3	09/12/2009	REG
P-46-L-9Q3	09/12/2009	REG
SMW-4-U-9Q3	09/12/2009	REG
SMW-4-L-9Q3	09/12/2009	REG
P-30-U-9Q3	09/12/2009	REG
P-30-M-9Q3	09/12/2009	REG
P-30-L-9Q3	09/12/2009	REG
SMW-4-M-9Q3	09/12/2009	REG

Samples Associated with DQE		
Field Sample ID	**Sample Date**	**Sample Purpose**
P-32-9Q3	09/13/2009	REG
BSVE-INLET-9Q3	09/13/2009	REG
PL-102A-9Q3	09/13/2009	REG
PL-2102-9Q3	09/13/2009	REG
SMW-2-M-9Q3	09/13/2009	REG
ASE-61A-9Q3	09/14/2009	REG
PMW-9-M-9Q3	09/14/2009	REG
PMW-9-U-9Q3	09/14/2009	REG
ASE-60A-9Q3	09/14/2009	REG
BC-7A-9Q3	09/14/2009	REG
ASE-54A-9Q3	09/15/2009	REG

Notes:

FD = Field duplicate
REG = Regular sample

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214751
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
ASE-128A-9Q3	214751-001
SMW-10-U-9Q3	214751-002
SMW-10-M-9Q3	214751-003
SMW-10-L-9Q3	214751-004
BC-18-9Q3	214751-005
ASE-125A-9Q3	214751-006
SMW-13-U-9Q3	214751-007
SMW-13-M-9Q3	214751-008
SMW-13-L-9Q3	214751-009
BSVE-SVM-9Q3-004	214751-010
SMW-8-U-9Q3	214751-011
SMW-8-M-9Q3	214751-012
SMW-9-U-9Q3	214751-013
SMW-9-M-9Q3	214751-014
SMW-9-L-9Q3	214751-015
BSVE-SVM-9Q3-003	214751-016
SMW-12-U-9Q3	214751-017
SMW-12-M-9Q3	214751-018
ASE-124A-9Q3	214751-019

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/23/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214751**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/09/09**
Samples Received:	**09/09/09**

This data package contains sample and QC results for nineteen air samples, requested for the above referenced project on 09/09/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
Many samples were diluted due to passive grab sampling.

No other analytical problems were encountered.

Chain of Custody

214751

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler:
PO # 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
1	ASE-128A	68	75	ASE-128A-9Q3	9/2/09	0140	AIR	AIR		1	G	N	X				100
2	SMW-10-U	76		SMW-10-U-9Q3	9/2/09	0214	AIR	AIR		1	G	N	X				191
3	SMW-10-M	20	25	SMW-10-M-9Q3	9/2/09	0238	AIR	AIR		1	G	N	X				137
4	SMW-10-L	55		SMW-10-L-9Q3	9/2/09	0310	AIR	AIR		1	G	N	X				155
5	~~ASE-112A~~																
6	BC-18	60	78	BC-18-9Q3	9/2/09	0454	AIR	AIR		1	G	N	X				196
7	ASE-125A	69	77	ASE-125-9Q3	9/2/09	0556	AIR	AIR		1	G	N	X				156
8																	
9																	
10																	
11																	
12																	

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	CH2M				
Date/Time	9/3/09 0740	Date/Time		Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
			CIT		
Date/Time		Date/Time	09/03/09 0930	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214751

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler:
PO # 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
7	1 SMW-13-u	5	9	SMW-13-u-9Q3	9/3/09	2350	AIR	AIR	Reg	1	G	N	X				67
8	2 SMW-13-m	19.1	24.1	SMW-13-m-9Q3	9/3/09	0028	AIR	AIR	Reg	1	G	N	X				61
9	3 SMW-13-L	54.9	73.67	SMW-13-L-9Q3	9/3/09	0116	AIR	AIR	Reg	1	G	N	X				122
10	4 Field QC	-	-	BSVE-SM-9Q3-004	9/3/09	0100	AIR	AIR	Reg	1	G	N	X				00121
11	5 SMW-8-u	5	9	SMW-8-u-9Q3	9/3/09	0208	AIR	AIR	Reg	1	G	N	X				195
12	6 SMW-8-m	20	25	SMW-8-m-9Q3	9/3/09	0240	AIR	AIR	Reg	1	G	N	X				171
13	7 SMW-9-u	5	9	SMW-9-u-9Q3	9/3/09	0312	AIR	AIR	Reg	1	G	N	X				166
14	8 SMW-9-m	20	25	SMW-9-m-9Q3	9/3/09	0338	AIR	AIR	Reg	1	G	N	X				188
15	9 SMW-9-L	55	74	SMW-9-L-9Q3	9/3/09	0410	AIR	AIR	Reg	1	G	N	X				149
16	10 Field QC	-	-	BSVE-SVM-9Q3-003	9/3/09	0412	AIR	AIR	Reg	1	G	N	X				83
17	11 SMW-12-u	5	9	SMW-12-u-9Q3	9/3/09	0450	AIR	AIR	Reg	1	G	N	X				154
18	12 SMW-12-m	20	25	SMW-12-m-9Q3	9/3/09	0514	AIR	AIR	Reg	1	G	N	X				143

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
[signature]	CH2M				
	Date/Time 9/3/09 740		Date/Time	Cooler Temp.	
Relinquished by	Company	Received by J. Goyette	Company C.T.	Condition	Custody Seals Intact
	Date/Time	[signature]	Date/Time 9-3-09 0920	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214751

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler:
PO # 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
19 1	ASE-124A	69	77.52	ASE-124A-9Q3	9/3/09	0551	AIR	AIR	Reg	1	G	N	X				117
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Relinquished by	Company	CH2M	Received by	Company		Condition	Custody Seals Intact
	Date/Time	9/3/09 740		Date/Time		Cooler Temp.	
Relinquished by	Company		Received by	Company		Condition	Custody Seals Intact
	Date/Time			Date/Time 9.9.09 0930		Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4 Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214751/214752 Date Received 9.9.09 Number of coolers 1 Box
Client CH2MHill Project Honeywell Skyharbor

Date Opened 9.9.09 By (print) J. Goyette (sign)
Date Logged in 9.11.09 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info Fed Ex 79150565 0044

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
   ☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None Temp(°C) N/A

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

#12 214751-006 ASE-125A-9Q3
214751-010 BSVE-SVM-9Q3-004

Laboratory Job Number 214751

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-128A-9Q3	Diln Fac:	2.050
Lab ID:	214751-001	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/17/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	ND	1.0	ND	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.5	D1
Toluene	1.3	1.0	4.9	3.9	D1
Tetrachloroethene	ND	1.0	ND	7.0	D1
Ethylbenzene	2.6	1.0	11	4.5	D1
m,p-Xylenes	3.0	1.0	13	4.5	D1
o-Xylene	1.1	1.0	5.0	4.5	D1
1,3,5-Trimethylbenzene	5.1	1.0	25	5.0	D1
1,2,4-Trimethylbenzene	22	1.0	110	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	4.2	2.1	18	8.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-10-U-9Q3	Diln Fac:	2.110
Lab ID:	214751-002	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/17/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.2	D1
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	ND	1.1	ND	5.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
Methylene Chloride	ND	1.1	ND	3.7	D1
Freon 113	ND	1.1	ND	8.1	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.7	D1
Chloroform	ND	1.1	ND	5.2	D1
1,2-Dichloroethane	ND	1.1	ND	4.3	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.8	D1
Benzene	ND	1.1	ND	3.4	D1
Carbon Tetrachloride	ND	1.1	ND	6.6	D1
1,4-Dioxane	ND	1.1	ND	3.8	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	1.7	1.1	12	7.2	D1
Ethylbenzene	1.4	1.1	6.3	4.6	D1
m,p-Xylenes	1.7	1.1	7.3	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	3.3	1.1	16	5.2	D1
1,2,4-Trimethylbenzene	14	1.1	70	5.2	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.3	D1
Xylene (total)	1.7	1.1	7.3	4.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-10-M-9Q3	Diln Fac:	2.060
Lab ID:	214751-003	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/17/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	ND	1.0	ND	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.5	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	2.9	1.0	20	7.0	D1
Ethylbenzene	1.1	1.0	4.7	4.5	D1
m,p-Xylenes	1.2	1.0	5.2	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	2.3	1.0	12	5.1	D1
1,2,4-Trimethylbenzene	11	1.0	53	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	1.2	1.0	5.2	4.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-10-L-9Q3	Diln Fac:	2.040
Lab ID:	214751-004	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.2	1.0	5.8	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.3	1.0	7.3	5.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	ND	1.0	ND	7.8	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	ND	1.0	ND	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	5.4	1.0	37	6.9	D1
Ethylbenzene	ND	1.0	ND	4.4	D1
m,p-Xylenes	ND	1.0	ND	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	1.4	1.0	6.9	5.0	D1
1,2,4-Trimethylbenzene	6.8	1.0	34	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	ND	2.0	ND	8.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BC-18-9Q3	Diln Fac:	2.040
Lab ID:	214751-005	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.0	D1
Vinyl Chloride	1.1	1.0	2.7	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.2	1.0	6.7	5.7	D1
1,1-Dichloroethene	34	1.0	140	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	2.5	1.0	19	7.8	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	82	1.0	330	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	17	1.0	68	4.0	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	2.1	1.0	10	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	3.4	1.0	11	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	73	1.0	390	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	9.7	1.0	66	6.9	D1
Ethylbenzene	2.2	1.0	9.7	4.4	D1
m,p-Xylenes	ND	1.0	ND	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	1.1	1.0	5.6	5.0	D1
1,2,4-Trimethylbenzene	5.4	1.0	26	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	ND	2.0	ND	8.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-125A-9Q3	Diln Fac:	2.100
Lab ID:	214751-006	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.2	D1
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	1.5	1.1	8.7	5.9	D1
1,1-Dichloroethene	2.2	1.1	8.7	4.2	D1
Methylene Chloride	ND	1.1	ND	3.6	D1
Freon 113	ND	1.1	ND	8.0	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	14	1.1	58	4.2	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.7	D1
Chloroform	4.9	1.1	24	5.1	D1
1,2-Dichloroethane	ND	1.1	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.7	D1
Benzene	ND	1.1	ND	3.4	D1
Carbon Tetrachloride	ND	1.1	ND	6.6	D1
1,4-Dioxane	ND	1.1	ND	3.8	D1
Trichloroethene	4.1	1.1	22	5.6	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	5.8	1.1	40	7.1	D1
Ethylbenzene	ND	1.1	ND	4.6	D1
m,p-Xylenes	ND	1.1	ND	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.2	D1
1,2,4-Trimethylbenzene	3.5	1.1	17	5.2	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.3	D1
Xylene (total)	ND	2.1	ND	9.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-13-U-9Q3	Diln Fac:	2.120
Lab ID:	214751-007	Batch#:	155025
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	4.0	1.1	20	5.2	D1
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	1.6	1.1	9.0	6.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
Methylene Chloride	ND	1.1	ND	3.7	D1
Freon 113	ND	1.1	ND	8.1	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	9.6	1.1	34	3.7	D1
Chloroform	ND	1.1	ND	5.2	D1
1,2-Dichloroethane	ND	1.1	ND	4.3	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.8	D1
Benzene	11	1.1	35	3.4	D1
Carbon Tetrachloride	ND	1.1	ND	6.7	D1
1,4-Dioxane	ND	1.1	ND	3.8	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	13	1.1	85	7.2	D1
Ethylbenzene	15	1.1	64	4.6	D1
m,p-Xylenes	8.5	1.1	37	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	8.4	1.1	41	5.2	D1
1,2,4-Trimethylbenzene	38	1.1	190	5.2	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.4	D1
Xylene (total)	8.5	2.1	37	9.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	110	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-13-M-9Q3	Diln Fac:	2.060
Lab ID:	214751-008	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	3.2	1.0	16	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.4	1.0	7.8	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	5.8	1.0	20	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	7.5	1.0	24	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.5	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	8.4	1.0	57	7.0	D1
Ethylbenzene	11	1.0	46	4.5	D1
m,p-Xylenes	6.3	1.0	27	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	6.1	1.0	30	5.1	D1
1,2,4-Trimethylbenzene	29	1.0	140	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	6.3	2.1	27	8.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-13-L-9Q3	Diln Fac:	2.070
Lab ID:	214751-009	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.8	1.0	8.9	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	2.4	1.0	13	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	4.5	1.0	16	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	6.6	1.0	21	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	6.0	1.0	41	7.0	D1
Ethylbenzene	8.9	1.0	39	4.5	D1
m,p-Xylenes	5.3	1.0	23	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	5.0	1.0	25	5.1	D1
1,2,4-Trimethylbenzene	24	1.0	120	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	5.3	2.1	23	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-004	Diln Fac:	2.090
Lab ID:	214751-010	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.5	1.0	7.3	5.2	D1
Vinyl Chloride	ND	1.0	ND	2.7	D1
Chloroethane	ND	1.0	ND	2.8	D1
Trichlorofluoromethane	1.8	1.0	10	5.9	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	8.0	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	3.8	1.0	13	3.7	D1
Chloroform	ND	1.0	ND	5.1	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.7	D1
Benzene	5.0	1.0	16	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.6	D1
1,4-Dioxane	ND	1.0	ND	3.8	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	5.4	1.0	36	7.1	D1
Ethylbenzene	6.6	1.0	29	4.5	D1
m,p-Xylenes	3.8	1.0	17	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	3.7	1.0	18	5.1	D1
1,2,4-Trimethylbenzene	18	1.0	90	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.3	D1
Xylene (total)	3.8	2.1	17	9.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-8-U-9Q3	Diln Fac:	2.020
Lab ID:	214751-011	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	2.8	1.0	16	5.7	D1
1,1-Dichloroethene	1.8	1.0	7.0	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	4.7	1.0	36	7.7	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	1.6	1.0	5.5	3.6	D1
Chloroform	ND	1.0	ND	4.9	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	2.5	1.0	8.0	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.6	D1
Trichloroethene	9.8	1.0	52	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	12	1.0	84	6.9	D1
Ethylbenzene	3.0	1.0	13	4.4	D1
m,p-Xylenes	1.9	1.0	8.2	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	1.8	1.0	8.6	5.0	D1
1,2,4-Trimethylbenzene	9.2	1.0	45	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	1.9	1.0	8.2	4.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-8-M-9Q3	Diln Fac:	2.070
Lab ID:	214751-012	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D2
Vinyl Chloride	ND	1.0	ND	2.6	D2
Chloroethane	ND	1.0	ND	2.7	D2
Trichlorofluoromethane	3.2	1.0	18	5.8	D2
1,1-Dichloroethene	60	1.0	240	4.1	D2
Methylene Chloride	ND	1.0	ND	3.6	D2
Freon 113	4.9	1.0	38	7.9	D2
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D2
1,1-Dichloroethane	110	1.0	430	4.2	D2
MTBE	ND	1.0	ND	3.7	D2
cis-1,2-Dichloroethene	4.6	1.0	18	4.1	D2
n-Hexane	2.0	1.0	7.0	3.6	D2
Chloroform	3.2	1.0	16	5.1	D2
1,2-Dichloroethane	ND	1.0	ND	4.2	D2
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D2
Benzene	3.0	1.0	9.6	3.3	D2
Carbon Tetrachloride	ND	1.0	ND	6.5	D2
1,4-Dioxane	ND	1.0	ND	3.7	D2
Trichloroethene	130	1.0	680	5.6	D2
Toluene	ND	1.0	ND	3.9	D2
Tetrachloroethene	31	1.0	210	7.0	D2
Ethylbenzene	3.6	1.0	16	4.5	D2
m,p-Xylenes	2.2	1.0	9.6	4.5	D2
o-Xylene	ND	1.0	ND	4.5	D2
1,3,5-Trimethylbenzene	2.2	1.0	11	5.1	D2
1,2,4-Trimethylbenzene	11	1.0	55	5.1	D2
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D2
Xylene (total)	2.2	2.1	9.6	9.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-9-U-9Q3	Diln Fac:	2.090
Lab ID:	214751-013	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.2	D1
Vinyl Chloride	ND	1.0	ND	2.7	D1
Chloroethane	ND	1.0	ND	2.8	D1
Trichlorofluoromethane	ND	1.0	ND	5.9	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	8.0	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	3.1	1.0	11	3.7	D1
Chloroform	ND	1.0	ND	5.1	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.7	D1
Benzene	4.4	1.0	14	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.6	D1
1,4-Dioxane	ND	1.0	ND	3.8	D1
Trichloroethene	1.6	1.0	8.7	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	3.7	1.0	25	7.1	D1
Ethylbenzene	5.5	1.0	24	4.5	D1
m,p-Xylenes	3.2	1.0	14	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	3.3	1.0	16	5.1	D1
1,2,4-Trimethylbenzene	17	1.0	84	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.3	D1
Xylene (total)	3.2	2.1	14	9.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-9-M-9Q3	Diln Fac:	2.070
Lab ID:	214751-014	Batch#:	155025
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	1.1	1.0	4.4	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	2.0	1.0	7.2	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	2.8	1.0	9.0	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	1.6	1.0	11	7.0	D1
Ethylbenzene	3.9	1.0	17	4.5	D1
m,p-Xylenes	2.3	1.0	10	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	2.5	1.0	12	5.1	D1
1,2,4-Trimethylbenzene	13	1.0	62	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	2.3	2.1	10	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	105	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-9-L-9Q3	Diln Fac:	2.030
Lab ID:	214751-015	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.4	1.0	8.0	5.7	D1
1,1-Dichloroethene	16	1.0	62	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	ND	1.0	ND	7.8	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	69	1.0	280	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	2.2	1.0	8.8	4.0	D1
n-Hexane	2.2	1.0	7.8	3.6	D1
Chloroform	4.7	1.0	23	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	3.3	1.0	11	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	17	1.0	92	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	18	1.0	120	6.9	D1
Ethylbenzene	3.7	1.0	16	4.4	D1
m,p-Xylenes	2.2	1.0	9.4	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	1.8	1.0	8.8	5.0	D1
1,2,4-Trimethylbenzene	9.8	1.0	48	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	2.2	2.0	9.4	8.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-003	Diln Fac:	2.030
Lab ID:	214751-016	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.0	D2
Vinyl Chloride	ND	1.0	ND	2.6	D2
Chloroethane	ND	1.0	ND	2.7	D2
Trichlorofluoromethane	3.3	1.0	18	5.7	D2
1,1-Dichloroethene	ND	1.0	ND	4.0	D2
Methylene Chloride	ND	1.0	ND	3.5	D2
Freon 113	5.0	1.0	38	7.8	D2
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D2
1,1-Dichloroethane	ND	1.0	ND	4.1	D2
MTBE	ND	1.0	ND	3.7	D2
cis-1,2-Dichloroethene	4.9	1.0	19	4.0	D2
n-Hexane	6.0	1.0	21	3.6	D2
Chloroform	3.3	1.0	16	5.0	D2
1,2-Dichloroethane	ND	1.0	ND	4.1	D2
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D2
Benzene	7.9	1.0	25	3.2	D2
Carbon Tetrachloride	ND	1.0	ND	6.4	D2
1,4-Dioxane	ND	1.0	ND	3.7	D2
Trichloroethene	120	1.0	670	5.5	D2
Toluene	ND	1.0	ND	3.8	D2
Tetrachloroethene	29	1.0	200	6.9	D2
Ethylbenzene	9.7	1.0	42	4.4	D2
m,p-Xylenes	5.8	1.0	25	4.4	D2
o-Xylene	ND	1.0	ND	4.4	D2
1,3,5-Trimethylbenzene	5.8	1.0	28	5.0	D2
1,2,4-Trimethylbenzene	28	1.0	140	5.0	D2
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D2
Xylene (total)	5.8	2.0	25	8.8	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-12-U-9Q3	Diln Fac:	2.070
Lab ID:	214751-017	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.2	1.0	6.8	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	1.7	1.0	6.0	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	2.3	1.0	7.2	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	7.3	1.0	49	7.0	D1
Ethylbenzene	3.0	1.0	13	4.5	D1
m,p-Xylenes	1.8	1.0	7.7	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	1.9	1.0	9.5	5.1	D1
1,2,4-Trimethylbenzene	9.7	1.0	48	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	1.8	1.0	7.7	4.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-12-M-9Q3	Diln Fac:	1.950
Lab ID:	214751-018	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.98	ND	4.8	D1
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
Trichlorofluoromethane	2.9	0.98	16	5.5	D1
1,1-Dichloroethene	ND	0.98	ND	3.9	D1
Methylene Chloride	ND	0.98	ND	3.4	D1
Freon 113	2.3	0.98	17	7.5	D1
trans-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	ND	0.98	ND	3.9	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
n-Hexane	1.4	0.98	4.9	3.4	D1
Chloroform	ND	0.98	ND	4.8	D1
1,2-Dichloroethane	ND	0.98	ND	3.9	D1
1,1,1-Trichloroethane	ND	0.98	ND	5.3	D1
Benzene	1.8	0.98	5.9	3.1	D1
Carbon Tetrachloride	ND	0.98	ND	6.1	D1
1,4-Dioxane	ND	0.98	ND	3.5	D1
Trichloroethene	ND	0.98	ND	5.2	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	11	0.98	78	6.6	D1
Ethylbenzene	2.5	0.98	11	4.2	D1
m,p-Xylenes	1.5	0.98	6.7	4.2	D1
o-Xylene	ND	0.98	ND	4.2	D1
1,3,5-Trimethylbenzene	1.6	0.98	8.0	4.8	D1
1,2,4-Trimethylbenzene	8.4	0.98	41	4.8	D1
1,4-Dichlorobenzene	ND	0.98	ND	5.9	D1
Xylene (total)	1.5	0.98	6.7	4.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	105	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-124A-9Q3	Units (M):	ug/m3
Lab ID:	214751-019	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed	ADEQ Flags
Freon 12	1.7	1.0	8.2	5.0	2.020	09/18/09	D2
Vinyl Chloride	ND	1.0	ND	2.6	2.020	09/18/09	D2
Chloroethane	ND	1.0	ND	2.7	2.020	09/18/09	D2
Trichlorofluoromethane	5.6	1.0	32	5.7	2.020	09/18/09	D2
1,1-Dichloroethene	ND	1.0	ND	4.0	2.020	09/18/09	D2
Methylene Chloride	ND	1.0	ND	3.5	2.020	09/18/09	D2
Freon 113	5.9	1.0	46	7.7	2.020	09/18/09	D2
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	2.020	09/18/09	D2
1,1-Dichloroethane	220	2.0	890	8.2	4.040	09/19/09	D2
MTBE	1.0	1.0	3.7	3.6	2.020	09/18/09	D2
cis-1,2-Dichloroethene	3.3	1.0	13	4.0	2.020	09/18/09	D2
n-Hexane	1.2	1.0	4.3	3.6	2.020	09/18/09	D2
Chloroform	3.0	1.0	15	4.9	2.020	09/18/09	D2
1,2-Dichloroethane	ND	1.0	ND	4.1	2.020	09/18/09	D2
1,1,1-Trichloroethane	ND	1.0	ND	5.5	2.020	09/18/09	D2
Benzene	2.4	1.0	7.7	3.2	2.020	09/18/09	D2
Carbon Tetrachloride	ND	1.0	ND	6.4	2.020	09/18/09	D2
1,4-Dioxane	ND	1.0	ND	3.6	2.020	09/18/09	D2
Trichloroethene	43	1.0	230	5.4	2.020	09/18/09	D2
Toluene	ND	1.0	ND	3.8	2.020	09/18/09	D2
Tetrachloroethene	30	1.0	210	6.9	2.020	09/18/09	D2
Ethylbenzene	2.3	1.0	9.8	4.4	2.020	09/18/09	D2
m,p-Xylenes	1.4	1.0	5.9	4.4	2.020	09/18/09	D2
o-Xylene	ND	1.0	ND	4.4	2.020	09/18/09	D2
1,3,5-Trimethylbenzene	1.4	1.0	7.1	5.0	2.020	09/18/09	D2
1,2,4-Trimethylbenzene	7.3	1.0	36	5.0	2.020	09/18/09	D2
1,4-Dichlorobenzene	ND	1.0	ND	6.1	2.020	09/18/09	D2
Xylene (total)	1.4	1.0	5.9	4.4	2.020	09/18/09	D2

Surrogate	%REC	Limits	Diln Fac	Analyzed	ADEQ Flags
Bromofluorobenzene	101	70-130	2.020	09/18/09	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC512503	Diln Fac:	1.000
Matrix:	Air	Batch#:	155025
Units (V):	ppbv	Analyzed:	09/17/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155025
Units (V):	ppbv	Analyzed:	09/17/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512504

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.232	92	70-130	
Vinyl Chloride	10.00	8.854	89	70-130	
Chloroethane	10.00	10.18	102	70-130	
Trichlorofluoromethane	10.00	9.189	92	70-130	
1,1-Dichloroethene	10.00	9.550	96	70-130	
Methylene Chloride	10.00	9.638	96	70-130	
Freon 113	10.00	9.990	100	70-130	
trans-1,2-Dichloroethene	10.00	10.13	101	70-130	
1,1-Dichloroethane	10.00	9.288	93	70-130	
MTBE	10.00	9.778	98	70-130	
cis-1,2-Dichloroethene	10.00	8.822	88	70-130	
n-Hexane	10.00	9.534	95	70-130	
Chloroform	10.00	9.236	92	70-130	
1,2-Dichloroethane	10.00	8.970	90	70-130	
1,1,1-Trichloroethane	10.00	9.037	90	70-130	
Benzene	10.00	8.972	90	70-130	
Carbon Tetrachloride	10.00	8.168	82	70-130	
1,4-Dioxane	10.00	8.210	82	70-130	
Trichloroethene	10.00	9.270	93	70-130	
Toluene	10.00	9.180	92	70-130	
Tetrachloroethene	10.00	9.756	98	70-130	
Ethylbenzene	10.00	9.714	97	70-130	
m,p-Xylenes	20.00	19.28	96	70-130	
o-Xylene	10.00	9.591	96	70-130	
1,3,5-Trimethylbenzene	10.00	9.377	94	70-130	
1,2,4-Trimethylbenzene	10.00	9.603	96	70-130	
1,4-Dichlorobenzene	10.00	9.264	93	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155025
Units (V):	ppbv	Analyzed:	09/17/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512505

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.141	91	70-130	1	25	
Vinyl Chloride	10.00	8.959	90	70-130	1	25	
Chloroethane	10.00	9.625	96	70-130	6	25	
Trichlorofluoromethane	10.00	8.760	88	70-130	5	25	
1,1-Dichloroethene	10.00	9.419	94	70-130	1	25	
Methylene Chloride	10.00	9.432	94	70-130	2	25	
Freon 113	10.00	9.512	95	70-130	5	25	
trans-1,2-Dichloroethene	10.00	10.08	101	70-130	0	25	
1,1-Dichloroethane	10.00	9.435	94	70-130	2	25	
MTBE	10.00	9.692	97	70-130	1	25	
cis-1,2-Dichloroethene	10.00	8.819	88	70-130	0	25	
n-Hexane	10.00	9.022	90	70-130	6	25	
Chloroform	10.00	9.386	94	70-130	2	25	
1,2-Dichloroethane	10.00	9.060	91	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.061	91	70-130	0	25	
Benzene	10.00	9.132	91	70-130	2	25	
Carbon Tetrachloride	10.00	8.048	80	70-130	1	25	
1,4-Dioxane	10.00	7.914	79	70-130	4	25	
Trichloroethene	10.00	9.592	96	70-130	3	25	
Toluene	10.00	8.785	88	70-130	4	25	
Tetrachloroethene	10.00	9.357	94	70-130	4	25	
Ethylbenzene	10.00	9.335	93	70-130	4	25	
m,p-Xylenes	20.00	18.36	92	70-130	5	25	
o-Xylene	10.00	9.269	93	70-130	3	25	
1,3,5-Trimethylbenzene	10.00	9.228	92	70-130	2	25	
1,2,4-Trimethylbenzene	10.00	9.458	95	70-130	2	25	
1,4-Dichlorobenzene	10.00	9.118	91	70-130	2	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC512649	Diln Fac:	1.000
Matrix:	Air	Batch#:	155061
Units (V):	ppbv	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155061
Units (V):	ppbv	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512650

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.049	90	70-130	
Vinyl Chloride	10.00	7.712	77	70-130	
Chloroethane	10.00	9.722	97	70-130	
Trichlorofluoromethane	10.00	8.922	89	70-130	
1,1-Dichloroethene	10.00	9.299	93	70-130	
Methylene Chloride	10.00	9.382	94	70-130	
Freon 113	10.00	9.487	95	70-130	
trans-1,2-Dichloroethene	10.00	9.925	99	70-130	
1,1-Dichloroethane	10.00	9.174	92	70-130	
MTBE	10.00	9.416	94	70-130	
cis-1,2-Dichloroethene	10.00	8.645	86	70-130	
n-Hexane	10.00	9.321	93	70-130	
Chloroform	10.00	9.342	93	70-130	
1,2-Dichloroethane	10.00	9.019	90	70-130	
1,1,1-Trichloroethane	10.00	8.939	89	70-130	
Benzene	10.00	9.063	91	70-130	
Carbon Tetrachloride	10.00	8.082	81	70-130	
1,4-Dioxane	10.00	8.041	80	70-130	
Trichloroethene	10.00	8.993	90	70-130	
Toluene	10.00	8.941	89	70-130	
Tetrachloroethene	10.00	9.493	95	70-130	
Ethylbenzene	10.00	9.474	95	70-130	
m,p-Xylenes	20.00	19.16	96	70-130	
o-Xylene	10.00	9.525	95	70-130	
1,3,5-Trimethylbenzene	10.00	9.460	95	70-130	
1,2,4-Trimethylbenzene	10.00	9.644	96	70-130	
1,4-Dichlorobenzene	10.00	9.108	91	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214751	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155061
Units (V):	ppbv	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512651

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.863	89	70-130	2	25	
Vinyl Chloride	10.00	8.379	84	70-130	8	25	
Chloroethane	10.00	9.070	91	70-130	7	25	
Trichlorofluoromethane	10.00	8.749	87	70-130	2	25	
1,1-Dichloroethene	10.00	9.414	94	70-130	1	25	
Methylene Chloride	10.00	9.376	94	70-130	0	25	
Freon 113	10.00	9.504	95	70-130	0	25	
trans-1,2-Dichloroethene	10.00	9.715	97	70-130	2	25	
1,1-Dichloroethane	10.00	8.990	90	70-130	2	25	
MTBE	10.00	9.405	94	70-130	0	25	
cis-1,2-Dichloroethene	10.00	8.586	86	70-130	1	25	
n-Hexane	10.00	9.290	93	70-130	0	25	
Chloroform	10.00	9.222	92	70-130	1	25	
1,2-Dichloroethane	10.00	8.742	87	70-130	3	25	
1,1,1-Trichloroethane	10.00	8.913	89	70-130	0	25	
Benzene	10.00	9.267	93	70-130	2	25	
Carbon Tetrachloride	10.00	7.957	80	70-130	2	25	
1,4-Dioxane	10.00	8.201	82	70-130	2	25	
Trichloroethene	10.00	8.903	89	70-130	1	25	
Toluene	10.00	9.208	92	70-130	3	25	
Tetrachloroethene	10.00	9.266	93	70-130	2	25	
Ethylbenzene	10.00	9.628	96	70-130	2	25	
m,p-Xylenes	20.00	19.36	97	70-130	1	25	
o-Xylene	10.00	9.605	96	70-130	1	25	
1,3,5-Trimethylbenzene	10.00	9.646	96	70-130	2	25	
1,2,4-Trimethylbenzene	10.00	9.685	97	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.101	91	70-130	0	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209375507001 File : 260_001 Time : 17-SEP-2009 17:29

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	70926	11.89	
75	30% - 66% of mass 95	205496	34.46	
95		596282	100.00	
96	5% - 9% of mass 95	41816	7.01	
173	< 2% of mass 174	1304	0.39	
174	50% - 120% of mass 95	334977	56.18	
175	4% - 9% of mass 174	20722	6.19	
176	93% - 101% of mass 174	316084	94.36	
177	5% - 9% of mass 176	24969	7.90	

CURTIS & TOMPKINS BFB TUNE FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209376751001 File : 261_001 Time : 18-SEP-2009 15:11

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	73590	11.00	
75	30% - 66% of mass 95	232871	34.79	
95		669290	100.00	
96	5% - 9% of mass 95	45915	6.86	
173	< 2% of mass 174	95	0.03	
174	50% - 120% of mass 95	360204	53.82	
175	4% - 9% of mass 174	28973	8.04	
176	93% - 101% of mass 174	358148	99.43	
177	5% - 9% of mass 176	20756	5.80	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214751 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	26	33.33	5	50.00	-7	100.0	-31
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	24	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	24	5.000	-12	10.00	-56	16.67	31	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	-39	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	-22
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	-25
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	-21
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	-22	1.667	0	5.000	-12	10.00	-8	16.67	23	33.33	30				
Trichloroethene	0.167	25	0.500	1	1.667	26	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	-21	100.0	-40
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	25	0.500	3	1.667	25	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	-28
Ethylbenzene	0.167	22	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	-31
m,p-Xylenes	0.333	26	1.000	8	3.333	22	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	-35
o-Xylene	0.167	31	0.500	5	1.667	25	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	-24	100.0	-33
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	22	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	-27
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	26	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	-30
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512504 IDF : 1.0
Seqnum : 1209375507002.2 File : 260_002 Time : 17-SEP-2009 18:27
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7498	10.00	9.232	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.7169	10.00	8.854	nL/L	-11	30	u
Chloroethane	0.0783	0.0797	10.00	10.18	nL/L	2	30	u
Trichlorofluoromethane	3.8163	3.5058	10.00	9.189	nL/L	-8	30	u
1,1-Dichloroethene	1.1450	1.0932	10.00	9.550	nL/L	-4	30	u
Methylene Chloride	0.7638	0.7361	10.00	9.638	nL/L	-4	30	u
Freon 113	2.6173	2.6139	10.00	9.990	nL/L	0	30	u
trans-1,2-Dichloroethene	1.7822	1.8053	10.00	10.13	nL/L	1	30	!v- u
1,1-Dichloroethane	2.2048	2.0472	10.00	9.288	nL/L	-7	30	u
MTBE	1.1668	1.1406	10.00	9.778	nL/L	-2	30	u
cis-1,2-Dichloroethene	2.0400	1.7992	10.00	8.822	nL/L	-12	30	u
n-Hexane	0.8500	0.8101	10.00	9.534	nL/L	-5	30	u
Chloroform	2.3937	2.2103	10.00	9.236	nL/L	-8	30	u
1,2-Dichloroethane	0.6592	0.5911	10.00	8.970	nL/L	-10	30	u
1,1,1-Trichloroethane	0.8700	0.7860	10.00	9.037	nL/L	-10	30	u
Benzene	0.4460	0.4000	10.00	8.972	nL/L	-10	30	u
Carbon Tetrachloride	1.0378	0.8474	10.00	8.168	nL/L	-18	30	u
1,4-Dioxane	0.1421	0.1166	10.00	8.210	nL/L	-18	30	!v- u
Trichloroethene	0.5119	0.4744	10.00	9.270	nL/L	-7	30	u
Toluene	1.5952	1.4640	10.00	9.180	nL/L	-8	30	u
Tetrachloroethene	0.5206	0.5077	10.00	9.756	nL/L	-2	30	u
Ethylbenzene	1.9165	1.8610	10.00	9.714	nL/L	-3	30	u
m,p-Xylenes	1.7645	1.7015	20.00	19.28	nL/L	-4	30	m u
o-Xylene	1.6441	1.5763	10.00	9.591	nL/L	-4	30	u
1,3,5-Trimethylbenzene	2.1384	2.0046	10.00	9.377	nL/L	-6	30	u
1,2,4-Trimethylbenzene	2.0458	1.9641	10.00	9.603	nL/L	-4	30	u
1,4-Dichlorobenzene	1.3357	1.2370	10.00	9.264	nL/L	-7	30	u
Bromofluorobenzene	0.7384	0.7523	10.00	10.19	nL/L	2	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	987195	-14.86	27.15	27.20	0.05
1,4-Difluorobenzene	4209375	3582852	-14.88	31.87	31.93	0.06
Chlorobenzene-d5	3611816	3080608	-14.71	41.74	41.79	0.05

SJD 09/18/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512650 IDF : 1.0
Seqnum : 1209376751002.1 File : 261_002 Time : 18-SEP-2009 16:09
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.6954	10.00	9.049	nL/L	-10	30	u
Vinyl Chloride	0.8099	0.6244	10.00	7.712	nL/L	-23	30	m u
Chloroethane	0.0783	0.0761	10.00	9.722	nL/L	-3	30	u
Trichlorofluoromethane	3.8163	3.4038	10.00	8.922	nL/L	-11	30	u
1,1-Dichloroethene	1.1450	1.0644	10.00	9.299	nL/L	-7	30	u
Methylene Chloride	0.7638	0.7166	10.00	9.382	nL/L	-6	30	u
Freon 113	2.6173	2.4823	10.00	9.487	nL/L	-5	30	u
trans-1,2-Dichloroethene	1.7822	1.7683	10.00	9.925	nL/L	-1	30	!v- u
1,1-Dichloroethane	2.2048	2.0221	10.00	9.174	nL/L	-8	30	u
MTBE	1.1668	1.0984	10.00	9.416	nL/L	-6	30	u
cis-1,2-Dichloroethene	2.0400	1.7631	10.00	8.645	nL/L	-14	30	u
n-Hexane	0.8500	0.7921	10.00	9.321	nL/L	-7	30	u
Chloroform	2.3937	2.2356	10.00	9.342	nL/L	-7	30	u
1,2-Dichloroethane	0.6592	0.5943	10.00	9.019	nL/L	-10	30	u
1,1,1-Trichloroethane	0.8700	0.7774	10.00	8.939	nL/L	-11	30	u
Benzene	0.4460	0.4041	10.00	9.063	nL/L	-9	30	u
Carbon Tetrachloride	1.0378	0.8385	10.00	8.082	nL/L	-19	30	u
1,4-Dioxane	0.1421	0.1142	10.00	8.041	nL/L	-20	30	!v- u
Trichloroethene	0.5119	0.4602	10.00	8.993	nL/L	-10	30	u
Toluene	1.5952	1.4259	10.00	8.941	nL/L	-11	30	u
Tetrachloroethene	0.5206	0.4941	10.00	9.493	nL/L	-5	30	u
Ethylbenzene	1.9165	1.8152	10.00	9.474	nL/L	-5	30	u
m,p-Xylenes	1.7645	1.6907	20.00	19.16	nL/L	-4	30	u
o-Xylene	1.6441	1.5655	10.00	9.525	nL/L	-5	30	u
1,3,5-Trimethylbenzene	2.1384	2.0223	10.00	9.460	nL/L	-5	30	u
1,2,4-Trimethylbenzene	2.0458	1.9724	10.00	9.644	nL/L	-4	30	u
1,4-Dichlorobenzene	1.3357	1.2162	10.00	9.108	nL/L	-9	30	u
Bromofluorobenzene	0.7384	0.7243	10.00	9.809	nL/L	-2	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	980036	-15.47	27.15	27.23	0.08
1,4-Difluorobenzene	4209375	3525856	-16.24	31.87	31.96	0.09
Chlorobenzene-d5	3611816	3123730	-13.51	41.74	41.81	0.07

SJD 09/23/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214751 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512650 IDF : 1.0
Seqnum : 1209376751002.2 File : 261_002 Time : 18-SEP-2009 16:09
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.6954	10.00	9.049	nL/L	-10	30	u
Vinyl Chloride	0.8099	0.6244	10.00	7.712	nL/L	-23	30	m u
Chloroethane	0.0783	0.0761	10.00	9.722	nL/L	-3	30	u
Trichlorofluoromethane	3.8163	3.4038	10.00	8.922	nL/L	-11	30	u
1,1-Dichloroethene	1.1450	1.0644	10.00	9.299	nL/L	-7	30	u
Methylene Chloride	0.7638	0.7166	10.00	9.382	nL/L	-6	30	u
Freon 113	2.6173	2.4823	10.00	9.487	nL/L	-5	30	u
trans-1,2-Dichloroethene	1.7822	1.7683	10.00	9.925	nL/L	-1	30	!v- u
1,1-Dichloroethane	2.2048	2.0221	10.00	9.174	nL/L	-8	30	u
MTBE	1.1668	1.0984	10.00	9.416	nL/L	-6	30	u
cis-1,2-Dichloroethene	2.0400	1.7631	10.00	8.645	nL/L	-14	30	u
n-Hexane	0.8500	0.7921	10.00	9.321	nL/L	-7	30	u
Chloroform	2.3937	2.2356	10.00	9.342	nL/L	-7	30	u
1,2-Dichloroethane	0.6592	0.5943	10.00	9.019	nL/L	-10	30	u
1,1,1-Trichloroethane	0.8700	0.7774	10.00	8.939	nL/L	-11	30	u
Benzene	0.4460	0.4041	10.00	9.063	nL/L	-9	30	u
Carbon Tetrachloride	1.0378	0.8385	10.00	8.082	nL/L	-19	30	u
1,4-Dioxane	0.1421	0.1142	10.00	8.041	nL/L	-20	30	!v- u
Trichloroethene	0.5119	0.4602	10.00	8.993	nL/L	-10	30	u
Toluene	1.5952	1.4259	10.00	8.941	nL/L	-11	30	u
Tetrachloroethene	0.5206	0.4941	10.00	9.493	nL/L	-5	30	u
Ethylbenzene	1.9165	1.8152	10.00	9.474	nL/L	-5	30	u
m,p-Xylenes	1.7645	1.6907	20.00	19.16	nL/L	-4	30	u
o-Xylene	1.6441	1.5655	10.00	9.525	nL/L	-5	30	u
1,3,5-Trimethylbenzene	2.1384	2.0223	10.00	9.460	nL/L	-5	30	u
1,2,4-Trimethylbenzene	2.0458	1.9724	10.00	9.644	nL/L	-4	30	u
1,4-Dichlorobenzene	1.3357	1.2162	10.00	9.108	nL/L	-9	30	u
Bromofluorobenzene	0.7384	0.7243	10.00	9.809	nL/L	-2	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	980036	-15.47	27.15	27.23	0.08
1,4-Difluorobenzene	4209375	3525856	-16.24	31.87	31.96	0.09
Chlorobenzene-d5	3611816	3123730	-13.51	41.74	41.81	0.07

SJD 09/23/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209375507

Date : 09/17/09 Reference : 244_010
Sequence : MSAIR01 260 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC512504	987195	27.20	3582852	31.93	3080608	41.79
003	BSD	QC512505	966893	27.19	3456208	31.92	3095115	41.78
004	BLANK	QC512503	972850	27.20	3488925	31.92	3091743	41.78
005	SAMPLE	214751-001	960634	27.19	3503985	31.92	2852489	41.78
006	SAMPLE	214751-002	946682	27.19	3373735	31.92	2838898	41.78
007	SAMPLE	214751-003	915758	27.19	3377200	31.92	2878738	41.78
008	SAMPLE	214751-004	940814	27.19	3327576	31.92	2828517	41.78
009	SAMPLE	214751-005	940070	27.19	3362738	31.92	2920598	41.78
010	SAMPLE	214751-006	947353	27.23	3397717	31.95	2889391	41.80
011	SAMPLE	214751-007	925366	27.22	3373217	31.95	2749673	41.80
012	SAMPLE	214751-008	931698	27.23	3411522	31.95	2741317	41.81
013	SAMPLE	214751-009	942099	27.23	3398815	31.95	2823985	41.81
014	SAMPLE	214751-010	961408	27.23	3415035	31.95	2836324	41.80
015	SAMPLE	214751-011	955100	27.20	3402567	31.92	2863739	41.79
016	SAMPLE	214751-012	955244	27.19	3391330	31.92	2844675	41.78
017	SAMPLE	214751-013	950820	27.19	3446826	31.92	2854722	41.78
018	SAMPLE	214906-001	947968	27.20	3387305	31.92	2936767	41.78
019	SAMPLE	214906-001	979228	27.19	3462816	31.92	2997943	41.78
020	SAMPLE	214751-014	957393	27.23	3392263	31.95	2823875	41.80

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209376751

Date : 09/18/09 Reference : 244_010
Sequence : MSAIR01 261 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC512650	980036	27.23	3525856	31.96	3123730	41.81
003	BSD	QC512651	983065	27.20	3521190	31.93	3062676	41.79
004	BLANK	QC512649	1064893	27.21	3646055	31.94	3257469	41.79
005	SAMPLE	214751-015	958505	27.20	3479234	31.92	2917749	41.78
006	SAMPLE	214751-016	926310	27.18	3331695	31.91	2826912	41.78
007	SAMPLE	214751-017	929883	27.19	3275413	31.92	2807779	41.78
008	SAMPLE	214751-018	925950	27.19	3286233	31.92	2730318	41.78
009	SAMPLE	214751-019	908582	27.19	3276951	31.92	2727128	41.78
010	SAMPLE	214752-001	900740	27.19	3254121	31.92	2659454	41.78
011	SAMPLE	214752-002	924041	27.20	3264600	31.93	2734325	41.78
012	SAMPLE	214752-003	926542	27.19	3324472	31.92	2787213	41.78
013	SAMPLE	214752-004	934230	27.19	3389071	31.92	2851966	41.79
014	SAMPLE	214752-005	940070	27.21	3379638	31.93	2841342	41.79
015	SAMPLE	214752-006	937603	27.20	3344829	31.93	2863091	41.79
016	SAMPLE	214752-007	972354	27.20	3405837	31.93	2968624	41.79
017	SAMPLE	214752-008	963477	27.20	3379264	31.93	2931478	41.79
018	SAMPLE	214752-009	947559	27.19	3382711	31.92	2905699	41.79
019	SAMPLE	214751-019	943722	27.20	3400863	31.93	2913139	41.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209375507

Instrument : MSAIR01 Begun : 09/17/09 17:29
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	260_001	TUN	BFB			09/17/09 17:29	1.0	1
002	260_002	CCV/BS	QC512504	Air	155025	09/17/09 18:27	1.0	2 1
003	260_003	BSD	QC512505	Air	155025	09/17/09 19:25	1.0	2 1
004	260_004	BLANK	QC512503	Air	155025	09/17/09 20:23	1.0	1
005	260_005	SAMPLE	214751-001	Air	155025	09/17/09 21:22	2.05	1
006	260_006	SAMPLE	214751-002	Air	155025	09/17/09 22:20	2.11	1
007	260_007	SAMPLE	214751-003	Air	155025	09/17/09 23:19	2.06	1
008	260_008	SAMPLE	214751-004	Air	155025	09/18/09 00:18	2.04	1
009	260_009	SAMPLE	214751-005	Air	155025	09/18/09 01:16	2.04	1
010	260_010	SAMPLE	214751-006	Air	155025	09/18/09 02:15	2.100	1
011	260_011	SAMPLE	214751-007	Air	155025	09/18/09 03:14	2.12	1
012	260_012	SAMPLE	214751-008	Air	155025	09/18/09 04:14	2.06	1
013	260_013	SAMPLE	214751-009	Air	155025	09/18/09 05:13	2.07	1
014	260_014	SAMPLE	214751-010	Air	155025	09/18/09 06:12	2.09	1
015	260_015	SAMPLE	214751-011	Air	155025	09/18/09 07:10	2.02	1
016	260_016	SAMPLE	214751-012	Air	155025	09/18/09 08:09	2.07	1
017	260_017	SAMPLE	214751-013	Air	155025	09/18/09 09:07	2.09	1
018	260_018	SAMPLE	214906-001	Air	155025	09/18/09 10:05	19.38	1
019	260_019	SAMPLE	214906-001	Air	155025	09/18/09 11:06	3.23	1
020	260_020	SAMPLE	214751-014	Air	155025	09/18/09 12:34	2.07	1

SJD 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BO 09/22/09 : Matrix spikes were not performed for this analysis in batch 155025 because they are not required by the method.

Analyst: SJD Date: 09/22/09 Reviewer: BO Date: 09/22/09

Standards used: 1=S12824 2=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209376751

Instrument : MSAIR01 Begun : 09/18/09 15:11
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	261_001	TUN	BFB			09/18/09 15:11	1.0	1	
002	261_002	CCV/BS	QC512650	Air	155061	09/18/09 16:09	1.0	2 1	
003	261_003	BSD	QC512651	Air	155061	09/18/09 17:07	1.0	2 1	
004	261_004	BLANK	QC512649	Air	155061	09/18/09 18:07	1.0	1	
005	261_005	SAMPLE	214751-015	Air	155061	09/18/09 19:07	2.03	1	
006	261_006	SAMPLE	214751-016	Air	155061	09/18/09 20:07	2.03	1	
007	261_007	SAMPLE	214751-017	Air	155061	09/18/09 21:07	2.07	1	
008	261_008	SAMPLE	214751-018	Air	155061	09/18/09 22:06	1.95	1	
009	261_009	SAMPLE	214751-019	Air	155061	09/18/09 23:06	2.02	1	1:DCA11=100
010	261_010	SAMPLE	214752-001	Air	155061	09/19/09 00:06	2.16	1	
011	261_011	SAMPLE	214752-002	Air	155061	09/19/09 01:06	2.82	1	
012	261_012	SAMPLE	214752-003	Air	155061	09/19/09 02:05	2.31	1	
013	261_013	SAMPLE	214752-004	Air	155061	09/19/09 03:04	2.03	1	
014	261_014	SAMPLE	214752-005	Air	155061	09/19/09 04:02	3.53	1	
015	261_015	SAMPLE	214752-006	Air	155061	09/19/09 05:01	2.82	1	
016	261_016	SAMPLE	214752-007	Air	155061	09/19/09 06:00	2.28	1	
017	261_017	SAMPLE	214752-008	Air	155061	09/19/09 06:59	2.73	1	
018	261_018	SAMPLE	214752-009	Air	155061	09/19/09 07:58	2.68	1	
019	261_019	SAMPLE	214751-019	Air	155061	09/19/09 14:14	4.04	1	

SJD 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

Analyst: SJD Date: 09/23/09 Reviewer: BO Date: 09/23/09

Standards used: 1=S12824 2=S12815

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PROJECT

Notebook No.

Continued From Page

Prepared by/Date	Sample ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
SOS 8/1/09	214496-001	C00135	14.52	23.14	1.59x	
	-002	C00141	14.39	23.09	1.60x	
	-003	C00194	14.56	23.18	1.59x	
	-004	C00115	14.09	23.04	1.64x	
	-005	C00186	14.48	23.13	1.60x	
	214444-001	C00174	10.09	23.29	2.31x	
	BLANK	C1699	—	—	1x	
SOS 9/3/09	214496-001	C00218	1.5 added	30.0 total added	31.8	20x of 1.59x can C00135
	-002	C00040			32.0x	20x of 1.60x can C00141
	-003	C00007			~~31.8~~ SOS 9/3/09 31.8x	20x of 1.59x can C00194
	-004	C00199			32.8x	20x of 1.64x can C00115
	-005	C00022			32.0x	20x of 1.60x can C00186
	BLANK	C1703	—	—	1x	
~~AOS~~ 9/15/09	214751-001	C00100	11.38	23.33	2.05x	
	-002	C00191	11.25	23.76	2.11x	
	-003	C00137	11.24	23.14	2.06x	
	-004	C00155	11.32	23.67	2.09x	
	-005	C00196	11.39	23.27	2.04x	
	-006	C00156	11.17	23.50	2.10x	
	-007	C00067	10.90	23.06	2.12x	
	-008	C00061	11.12	22.92	2.06x	
	-009	C00122	11.17	23.10	2.07x	
	-010	C00121	11.07	23.14	2.09x	
	-011	C00195	11.48	23.19	2.02x	
	-012	C00171	11.20	23.23	2.07x	
	-013	C00166	11.19	23.37	2.09x	
	-014	C00188	11.17	23.36	2.07x	
	BLANK	C1703	1x	1x		
	214906-001	C00173	7.61	24.57	3.23x	
~~AOS~~ 9/14/09	214751-015	C00149	11.29	22.97	2.03x	
	016	C00083	11.30	22.95	2.03x	
	017	C00154	11.60	24.00	2.07x	
	018	C00143	11.49	22.40	1.95x	
	019	C00117	11.50	23.25	2.07x	

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Read and Understood By

Signed | Date | Signed | Date

PROJECT

Notebook No.

Continued From Page

Prepared by / Date	Sample ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
SOS 9/1/09	214496-001	C00135	14.52	23.14	1.59x	
	-002	C00141	14.39	23.09	1.60x	
	-003	C00194	14.56	23.18	1.59x	
	-004	C00115	14.09	23.04	1.64x	
	-005	C00186	14.48	23.13	1.60x	
	214444-001	C00174	10.09	23.29	2.31x	
	BLANK	C1699	—	—	1x	
SOS 9/3/09	214496-001	C00218	1.5 added	30.0 total added	31.8	20x of 1.59x can C00135
	-002	C00040			32.0x	20x of 1.60x can C00141
	-003	C00007			~~31.8~~ 31.8x SOS 9/3/09	20x of 1.59x can C00194
	-004	C00199			32.8x	20x of 1.64x can C00115
	-005	C00022			32.0x	20x of 1.60x can C00186
	BLANK	C1703	—	—	1x	
AOS 9/15/09	214751-001	C00100	11.38	23.33	2.05x	
	-002	C00191	11.25	23.76	2.11x	
	-003	C00137	11.24	23.14	2.06x	
	-004	C00155	11.32	23.07	2.04x	
	-005	C00196	11.39	23.27	2.04x	
	-006	C00156	11.17	23.50	2.10x	
	-007	C00067	10.90	23.06	2.12x	
	-008	C00061	11.12	22.92	2.06x	
	-009	C00122	11.17	23.10	2.07x	
	-010	C00121	11.07	23.14	2.09x	
	-011	C00185	11.48	23.19	2.02x	
	-012	C00171	11.20	23.23	2.07x	
	-013	C00166	11.19	23.37	2.09x	
	-014	C00188	11.27	23.36	2.07x	
	BLANK	C1703	1x	1x		
	214906-001	C00093	7.61	24.57	3.23x	
AOS 9/16/09	214751-015	C00149	11.29	22.97	2.03x	
	016	C00053	11.30	22.95	2.03x	
	017	C00154	11.60	24.00	2.07x	
	018	C00143	11.49	22.40	1.95x	
	019	C00117	11.50	23.25	2.02x	

Continued on Page

Read and Understood By

Signed | Date | Signed | Date

PROJECT _____

Continued From Page _____

Prep on by Date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
Apr 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.13	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
Apr 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
Sto 9/16/09	BLANK	C1P05	~~1x~~ 50	~~1~~ 50	1.0x	
Apr 9/18/09	214752-010	C00070	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00184	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00060	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00084	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank				1.0x	
Apr 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214752
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
PMW-6-U-9Q3	214752-001
PMW-6-M-9Q3	214752-002
PMW-2-U-9Q3	214752-003
PMW-2-M-9Q3	214752-004
PMW-1-U-9Q3	214752-005
PMW-1-M-9Q3	214752-006
PMW-7-U-9Q3	214752-007
PMW-7-M-9Q3	214752-008
PMW-10-U-9Q3	214752-009
PMW-10-M-9Q3	214752-010
PMW-3-U-9Q3	214752-011
PMW-3-M-9Q3	214752-012
BSVE-SVM-9Q3-001	214752-013
SMW-14-U-9Q3	214752-014
SMW-14-M-9Q3	214752-015
SMW-14-L-9Q3	214752-016
ASE-123A-9Q3	214752-017
ASE-122A-9Q3	214752-018
SMW-11-U-9Q3	214752-019
BSVE-SVM-9Q3-005	214752-020
SMW-11-M-9Q3	214752-021
SMW-11-L-9Q3	214752-022

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/23/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214752**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/09/09**
Samples Received:	**09/09/09**

This data package contains sample and QC results for twenty two air samples, requested for the above referenced project on 09/09/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
Many samples were diluted due to passive grab sampling.

No other analytical problems were encountered.

Chain of Custody

214752

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: Trail Cortinas-Lopez
PO # 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
											Units						
1	PMW6-U	5	10	PMW-6-U-9Q3	090209	1323	AIR	AIR	REG	1	G	N	X				116
2	PMW-6-M	20	25	PMW-6-M-9Q3	090209	1353	AIR	AIR	REG	1	G	N	X				138
3	PMW-2-U	5	10	PMW-2-U-9Q3	090309	0556	AIR	AIR	REG	1	G	N	X				80
4	PMW-2-M	20	25	PMW-2-M-9Q3	090309	0613	AIR	AIR	REG	1	G	N	X				185
5	PMW-1-U	5	10	PMW-1-U-9Q3	090309	0644	AIR	AIR	REG	1	G	N	X				151
6	PMW-1-M	20	25	PMW-1-M-9Q3	090309	0702	AIR	AIR	REG	1	G	N	X				187
7	PMW-7-U	5	10	PMW-7-U-9Q3	090309	0724	AIR	AIR	REG	1	G	N	X				167
8	PMW-7-M	20	25	PMW-7-M-9Q3	090309	0742	AIR	AIR	REG	1	G	N	X				162
9	PMW-10-U	5	9.0	PMW-10-U-9Q3	090309	0954	AIR	AIR	REG	1	G	N	X				163
10	PMW-10-M	20	25	PMW-10-M-9Q3	090309	1017	AIR	AIR	REG	1	G	N	X				70
11	PMW-3-U	5	10	PMW-3-U-9Q3	090309	1118	AIR	AIR	REG	1	G	N	X				146
12	PMW-3-M	20	25	PMW-3-M-9Q3	090309	1148	AIR	AIR	REG	1	G	N	X				114

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Trail Cortinas Lopez	CH2MHILL	Fed Ex			
Date/Time	090309	Date/Time	1523	Cooler Temp.	
Relinquished by	Company	Received by	J. Goyette C-T	Condition	Custody Seals Intact
Date/Time		Date/Time	9/9/09 0930	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214752

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

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Privileged & Confidential		Site Name:	Sky Harbor AZ
		Phase:	
EDD To:	Jennifer Peterson jennifer.peterson@ch2m.com	Location of Site:	Phoenix, AZ
		Sampling Program	BSVE QTR SVM
Sampler:	Trail Cortinas-Lopez		
PO #	5101516	Preservative	
Analysis Turnaround Time (TAT):	10		
Consultant			
Full Report TAT:	10		

Sampling Co.:	CH2MHILL
Client Contact: (name, co., address)	CH2M HILL, 2625 South Plaza Drive, Suite 300, Tempe, AZ 85282
Preliminary Data To	Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL
Hard Copy To	Jennifer Peterson, CH2M HILL
Invoice To:	Honeywell/Copy to J. Peterson

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
13 1	FIELDQC	20	25	BSVE-SVM-9Q3-001	090309	1150	AIR	AIR	FD	1	G	N	X				184
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Relinquished by	Trail Cortinas	Company	CH2MHILL	Received by	FedEx	Company	
		Date/Time	090309		1523	Date/Time	
Relinquished by		Company		Received by		Company	
		Date/Time				Date/Time	9-9-09 0930

Condition		Custody Seals Intact	
Cooler Temp.			
Condition		Custody Seals Intact	
Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214752

37380-090903

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: Lars Peterson
PO #: 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
14 1	SMW-14-V	5.0	9.0	SMW-14-V-9Q3	9.3.09	0858	AIR	AIR	REG	1	G	N	X				00192
15 2	SMW-14-M	20.0	25.0	SMW-14-M-9Q3	9.3.09	0912	AIR	AIR	REG	1	G	N	X				00129
16 3	SMW-14-L	55.0	73.43	SMW-14-L-9Q3	9.3.09	0931	AIR	AIR	REG	1	G	N	X				00190
17 4	ASE-123A	62.0	69.38	ASE-123A-9Q3	9.3.09	1010	AIR	AIR	REG	1	G	N	X				00168
18 5	ASE-122A	63.0	71.02	ASE-122A-9Q3	9.3.09	1045	AIR	AIR	REG	1	G	N	X				00081
19 6	SMW-11-V	5.0	9.0	SMW-11-V-9Q3	9.3.09	2322	AIR	AIR	REG	1	G	N	X				00060
7	~~SMW-11-M~~	~~20.0~~	~~25.0~~	BSVE-SVM-9Q3-005	9.3.09	1800	AIR	AIR	REG	1	G	N	X				00098
20 8	SMW-11-M	20.0	25.0	SMW-11-M-9Q3	9.3.09	2337	AIR	AIR	REG	1	G	N	X				00131
21 9	SMW-11-L	55.2	75.18	SMW-11-L-9Q3	9.3.09	2359	AIR	AIR	REG	1	G	N	X				00069
22 10																	
11																	
12																	

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	CH2M HILL				
	Date/Time 9.4.09 1603		Date/Time 9/4/09 1603	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time 9-5-09 0930	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214751/214752 Date Received 9.9.09 Number of coolers 1 Box
Client CH2MHill Project Honeywell Skyharbor

Date Opened 9.9.09 By (print) J. Goyette (sign)
Date Logged in 9.11.09 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info Fed Ex 79150565 0044

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None Temp(°C) N/A

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

#12 214751-006 ASE-125A-9Q3
214751-010 BSVE-SVM-9Q3-004

Laboratory Job Number 214752

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-6-U-9Q3	Diln Fac:	2.160
Lab ID:	214752-001	Batch#:	155061
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.3	D1
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	ND	1.1	ND	6.1	D1
1,1-Dichloroethene	ND	1.1	ND	4.3	D1
Methylene Chloride	ND	1.1	ND	3.8	D1
Freon 113	ND	1.1	ND	8.3	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.3	D1
1,2-Dichloroethane	ND	1.1	ND	4.4	D1
1,1,1-Trichloroethane	1.9	1.1	11	5.9	D1
Benzene	ND	1.1	ND	3.5	D1
Carbon Tetrachloride	ND	1.1	ND	6.8	D1
1,4-Dioxane	ND	1.1	ND	3.9	D1
Trichloroethene	1.6	1.1	8.5	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	4.5	1.1	30	7.3	D1
Ethylbenzene	2.3	1.1	10	4.7	D1
m,p-Xylenes	2.3	1.1	9.9	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	5.2	1.1	25	5.3	D1
1,2,4-Trimethylbenzene	23	1.1	110	5.3	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.5	D1
Xylene (total)	2.3	2.2	9.9	9.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	106	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-6-M-9Q3	Diln Fac:	2.820
Lab ID:	214752-002	Batch#:	155061
Matrix:	Air	Sampled:	09/02/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.4	ND	7.0	D1
Vinyl Chloride	ND	1.4	ND	3.6	D1
Chloroethane	ND	1.4	ND	3.7	D1
Trichlorofluoromethane	ND	1.4	ND	7.9	D1
1,1-Dichloroethene	ND	1.4	ND	5.6	D1
Methylene Chloride	ND	1.4	ND	4.9	D1
Freon 113	ND	1.4	ND	11	D1
trans-1,2-Dichloroethene	ND	1.4	ND	5.6	D1
1,1-Dichloroethane	2.3	1.4	9.5	5.7	D1
MTBE	ND	1.4	ND	5.1	D1
cis-1,2-Dichloroethene	ND	1.4	ND	5.6	D1
n-Hexane	ND	1.4	ND	5.0	D1
Chloroform	2.5	1.4	12	6.9	D1
1,2-Dichloroethane	ND	1.4	ND	5.7	D1
1,1,1-Trichloroethane	1.6	1.4	8.8	7.7	D1
Benzene	ND	1.4	ND	4.5	D1
Carbon Tetrachloride	ND	1.4	ND	8.9	D1
1,4-Dioxane	ND	1.4	ND	5.1	D1
Trichloroethene	ND	1.4	ND	7.6	D1
Toluene	ND	1.4	ND	5.3	D1
Tetrachloroethene	3.4	1.4	23	9.6	D1
Ethylbenzene	1.6	1.4	6.9	6.1	D1
m,p-Xylenes	1.6	1.4	7.2	6.1	D1
o-Xylene	ND	1.4	ND	6.1	D1
1,3,5-Trimethylbenzene	3.8	1.4	19	6.9	D1
1,2,4-Trimethylbenzene	16	1.4	80	6.9	D1
1,4-Dichlorobenzene	ND	1.4	ND	8.5	D1
Xylene (total)	1.6	1.4	7.2	6.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-2-U-9Q3	Diln Fac:	2.310
Lab ID:	214752-003	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.2	ND	5.7	D1
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.0	D1
Trichlorofluoromethane	3.4	1.2	19	6.5	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
Methylene Chloride	ND	1.2	ND	4.0	D1
Freon 113	3.1	1.2	24	8.9	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	ND	1.2	ND	4.1	D1
Chloroform	ND	1.2	ND	5.6	D1
1,2-Dichloroethane	ND	1.2	ND	4.7	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.3	D1
Benzene	ND	1.2	ND	3.7	D1
Carbon Tetrachloride	ND	1.2	ND	7.3	D1
1,4-Dioxane	ND	1.2	ND	4.2	D1
Trichloroethene	29	1.2	160	6.2	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	1.4	1.2	9.7	7.8	D1
Ethylbenzene	ND	1.2	ND	5.0	D1
m,p-Xylenes	ND	1.2	ND	5.0	D1
o-Xylene	ND	1.2	ND	5.0	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	5.7	D1
1,2,4-Trimethylbenzene	ND	1.2	ND	5.7	D1
1,4-Dichlorobenzene	ND	1.2	ND	6.9	D1
Xylene (total)	ND	2.3	ND	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-2-M-9Q3	Diln Fac:	2.030
Lab ID:	214752-004	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.7	1.0	9.3	5.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	ND	1.0	ND	7.8	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	ND	1.0	ND	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	24	1.0	130	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	ND	1.0	ND	6.9	D1
Ethylbenzene	ND	1.0	ND	4.4	D1
m,p-Xylenes	ND	1.0	ND	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.0	D1
1,2,4-Trimethylbenzene	ND	1.0	ND	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	ND	2.0	ND	8.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-1-U-9Q3	Diln Fac:	3.530
Lab ID:	214752-005	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.8	ND	8.7	D1
Vinyl Chloride	ND	1.8	ND	4.5	D1
Chloroethane	ND	1.8	ND	4.7	D1
Trichlorofluoromethane	ND	1.8	ND	9.9	D1
1,1-Dichloroethene	ND	1.8	ND	7.0	D1
Methylene Chloride	ND	1.8	ND	6.1	D1
Freon 113	3.9	1.8	30	14	D1
trans-1,2-Dichloroethene	ND	1.8	ND	7.0	D1
1,1-Dichloroethane	8.3	1.8	34	7.1	D1
MTBE	ND	1.8	ND	6.4	D1
cis-1,2-Dichloroethene	ND	1.8	ND	7.0	D1
n-Hexane	ND	1.8	ND	6.2	D1
Chloroform	2.1	1.8	10	8.6	D1
1,2-Dichloroethane	ND	1.8	ND	7.1	D1
1,1,1-Trichloroethane	3.5	1.8	19	9.6	D1
Benzene	ND	1.8	ND	5.6	D1
Carbon Tetrachloride	ND	1.8	ND	11	D1
1,4-Dioxane	ND	1.8	ND	6.4	D1
Trichloroethene	ND	1.8	ND	9.5	D1
Toluene	ND	1.8	ND	6.7	D1
Tetrachloroethene	2.2	1.8	15	12	D1
Ethylbenzene	ND	1.8	ND	7.7	D1
m,p-Xylenes	ND	1.8	ND	7.7	D1
o-Xylene	ND	1.8	ND	7.7	D1
1,3,5-Trimethylbenzene	ND	1.8	ND	8.7	D1
1,2,4-Trimethylbenzene	ND	1.8	ND	8.7	D1
1,4-Dichlorobenzene	ND	1.8	ND	11	D1
Xylene (total)	ND	3.5	ND	15	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-1-M-9Q3	Diln Fac:	2.820
Lab ID:	214752-006	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.4	ND	7.0	D1
Vinyl Chloride	ND	1.4	ND	3.6	D1
Chloroethane	ND	1.4	ND	3.7	D1
Trichlorofluoromethane	1.9	1.4	11	7.9	D1
1,1-Dichloroethene	ND	1.4	ND	5.6	D1
Methylene Chloride	ND	1.4	ND	4.9	D1
Freon 113	2.7	1.4	20	11	D1
trans-1,2-Dichloroethene	ND	1.4	ND	5.6	D1
1,1-Dichloroethane	9.6	1.4	39	5.7	D1
MTBE	ND	1.4	ND	5.1	D1
cis-1,2-Dichloroethene	ND	1.4	ND	5.6	D1
n-Hexane	ND	1.4	ND	5.0	D1
Chloroform	ND	1.4	ND	6.9	D1
1,2-Dichloroethane	ND	1.4	ND	5.7	D1
1,1,1-Trichloroethane	4.7	1.4	25	7.7	D1
Benzene	ND	1.4	ND	4.5	D1
Carbon Tetrachloride	ND	1.4	ND	8.9	D1
1,4-Dioxane	ND	1.4	ND	5.1	D1
Trichloroethene	ND	1.4	ND	7.6	D1
Toluene	ND	1.4	ND	5.3	D1
Tetrachloroethene	1.6	1.4	11	9.6	D1
Ethylbenzene	ND	1.4	ND	6.1	D1
m,p-Xylenes	ND	1.4	ND	6.1	D1
o-Xylene	ND	1.4	ND	6.1	D1
1,3,5-Trimethylbenzene	ND	1.4	ND	6.9	D1
1,2,4-Trimethylbenzene	ND	1.4	ND	6.9	D1
1,4-Dichlorobenzene	ND	1.4	ND	8.5	D1
Xylene (total)	ND	2.8	ND	12	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-7-U-9Q3	Diln Fac:	2.280
Lab ID:	214752-007	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.6	D1
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
Trichlorofluoromethane	ND	1.1	ND	6.4	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
Methylene Chloride	ND	1.1	ND	4.0	D1
Freon 113	ND	1.1	ND	8.7	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	ND	1.1	ND	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	2.5	1.1	8.8	4.0	D1
Chloroform	ND	1.1	ND	5.6	D1
1,2-Dichloroethane	ND	1.1	ND	4.6	D1
1,1,1-Trichloroethane	ND	1.1	ND	6.2	D1
Benzene	19	1.1	61	3.6	D1
Carbon Tetrachloride	ND	1.1	ND	7.2	D1
1,4-Dioxane	ND	1.1	ND	4.1	D1
Trichloroethene	ND	1.1	ND	6.1	D1
Toluene	ND	1.1	ND	4.3	D1
Tetrachloroethene	3.3	1.1	22	7.7	D1
Ethylbenzene	1.8	1.1	7.7	5.0	D1
m,p-Xylenes	4.5	1.1	20	5.0	D1
o-Xylene	ND	1.1	ND	5.0	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.6	D1
1,2,4-Trimethylbenzene	6.9	1.1	34	5.6	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.9	D1
Xylene (total)	4.5	2.3	20	9.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-7-M-9Q3	Diln Fac:	2.730
Lab ID:	214752-008	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.4	ND	6.8	D1
Vinyl Chloride	ND	1.4	ND	3.5	D1
Chloroethane	ND	1.4	ND	3.6	D1
Trichlorofluoromethane	ND	1.4	ND	7.7	D1
1,1-Dichloroethene	ND	1.4	ND	5.4	D1
Methylene Chloride	ND	1.4	ND	4.7	D1
Freon 113	ND	1.4	ND	10	D1
trans-1,2-Dichloroethene	ND	1.4	ND	5.4	D1
1,1-Dichloroethane	ND	1.4	ND	5.5	D1
MTBE	ND	1.4	ND	4.9	D1
cis-1,2-Dichloroethene	ND	1.4	ND	5.4	D1
n-Hexane	ND	1.4	ND	4.8	D1
Chloroform	ND	1.4	ND	6.7	D1
1,2-Dichloroethane	ND	1.4	ND	5.5	D1
1,1,1-Trichloroethane	ND	1.4	ND	7.4	D1
Benzene	ND	1.4	ND	4.4	D1
Carbon Tetrachloride	ND	1.4	ND	8.6	D1
1,4-Dioxane	ND	1.4	ND	4.9	D1
Trichloroethene	ND	1.4	ND	7.3	D1
Toluene	ND	1.4	ND	5.1	D1
Tetrachloroethene	2.9	1.4	20	9.3	D1
Ethylbenzene	ND	1.4	ND	5.9	D1
m,p-Xylenes	ND	1.4	ND	5.9	D1
o-Xylene	ND	1.4	ND	5.9	D1
1,3,5-Trimethylbenzene	ND	1.4	ND	6.7	D1
1,2,4-Trimethylbenzene	ND	1.4	ND	6.7	D1
1,4-Dichlorobenzene	ND	1.4	ND	8.2	D1
Xylene (total)	ND	2.7	ND	12	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-10-U-9Q3	Diln Fac:	2.680
Lab ID:	214752-009	Batch#:	155061
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/19/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.3	ND	6.6	D1
Vinyl Chloride	ND	1.3	ND	3.4	D1
Chloroethane	ND	1.3	ND	3.5	D1
Trichlorofluoromethane	ND	1.3	ND	7.5	D1
1,1-Dichloroethene	4.9	1.3	20	5.3	D1
Methylene Chloride	ND	1.3	ND	4.7	D1
Freon 113	ND	1.3	ND	10	D1
trans-1,2-Dichloroethene	ND	1.3	ND	5.3	D1
1,1-Dichloroethane	6.0	1.3	24	5.4	D1
MTBE	ND	1.3	ND	4.8	D1
cis-1,2-Dichloroethene	ND	1.3	ND	5.3	D1
n-Hexane	ND	1.3	ND	4.7	D1
Chloroform	ND	1.3	ND	6.5	D1
1,2-Dichloroethane	ND	1.3	ND	5.4	D1
1,1,1-Trichloroethane	ND	1.3	ND	7.3	D1
Benzene	2.0	1.3	6.5	4.3	D1
Carbon Tetrachloride	ND	1.3	ND	8.4	D1
1,4-Dioxane	ND	1.3	ND	4.8	D1
Trichloroethene	35	1.3	190	7.2	D1
Toluene	ND	1.3	ND	5.0	D1
Tetrachloroethene	13	1.3	85	9.1	D1
Ethylbenzene	ND	1.3	ND	5.8	D1
m,p-Xylenes	ND	1.3	ND	5.8	D1
o-Xylene	ND	1.3	ND	5.8	D1
1,3,5-Trimethylbenzene	ND	1.3	ND	6.6	D1
1,2,4-Trimethylbenzene	ND	1.3	ND	6.6	D1
1,4-Dichlorobenzene	ND	1.3	ND	8.1	D1
Xylene (total)	ND	2.7	ND	12	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-10-M-9Q3	Diln Fac:	1.960
Lab ID:	214752-010	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.98	ND	4.8	D1
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
Trichlorofluoromethane	ND	0.98	ND	5.5	D1
1,1-Dichloroethene	8.2	0.98	33	3.9	D1
Methylene Chloride	ND	0.98	ND	3.4	D1
Freon 113	ND	0.98	ND	7.5	D1
trans-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	19	0.98	78	4.0	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	1.6	0.98	6.3	3.9	D1
n-Hexane	ND	0.98	ND	3.5	D1
Chloroform	1.5	0.98	7.3	4.8	D1
1,2-Dichloroethane	ND	0.98	ND	4.0	D1
1,1,1-Trichloroethane	1.4	0.98	7.7	5.3	D1
Benzene	ND	0.98	ND	3.1	D1
Carbon Tetrachloride	ND	0.98	ND	6.2	D1
1,4-Dioxane	ND	0.98	ND	3.5	D1
Trichloroethene	32	0.98	170	5.3	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	9.1	0.98	61	6.6	D1
Ethylbenzene	ND	0.98	ND	4.3	D1
m,p-Xylenes	ND	0.98	ND	4.3	D1
o-Xylene	ND	0.98	ND	4.3	D1
1,3,5-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,2,4-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,4-Dichlorobenzene	ND	0.98	ND	5.9	D1
Xylene (total)	ND	2.0	ND	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-3-U-9Q3	Diln Fac:	1.950
Lab ID:	214752-011	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.98	ND	4.8	D1
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
Trichlorofluoromethane	2.3	0.98	13	5.5	D1
1,1-Dichloroethene	ND	0.98	ND	3.9	D1
Methylene Chloride	ND	0.98	ND	3.4	D1
Freon 113	7.9	0.98	61	7.5	D1
trans-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	ND	0.98	ND	3.9	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
n-Hexane	ND	0.98	ND	3.4	D1
Chloroform	ND	0.98	ND	4.8	D1
1,2-Dichloroethane	ND	0.98	ND	3.9	D1
1,1,1-Trichloroethane	ND	0.98	ND	5.3	D1
Benzene	1.2	0.98	3.7	3.1	D1
Carbon Tetrachloride	ND	0.98	ND	6.1	D1
1,4-Dioxane	ND	0.98	ND	3.5	D1
Trichloroethene	43	0.98	230	5.2	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	8.0	0.98	54	6.6	D1
Ethylbenzene	ND	0.98	ND	4.2	D1
m,p-Xylenes	ND	0.98	ND	4.2	D1
o-Xylene	ND	0.98	ND	4.2	D1
1,3,5-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,2,4-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,4-Dichlorobenzene	ND	0.98	ND	5.9	D1
Xylene (total)	ND	2.0	ND	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-3-M-9Q3	Diln Fac:	2.220
Lab ID:	214752-012	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.5	D1
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
Trichlorofluoromethane	4.2	1.1	24	6.2	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
Methylene Chloride	ND	1.1	ND	3.9	D1
Freon 113	12	1.1	91	8.5	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	1.2	1.1	5.6	5.4	D1
1,2-Dichloroethane	ND	1.1	ND	4.5	D1
1,1,1-Trichloroethane	2.2	1.1	12	6.1	D1
Benzene	ND	1.1	ND	3.5	D1
Carbon Tetrachloride	ND	1.1	ND	7.0	D1
1,4-Dioxane	ND	1.1	ND	4.0	D1
Trichloroethene	40	1.1	220	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	6.3	1.1	43	7.5	D1
Ethylbenzene	ND	1.1	ND	4.8	D1
m,p-Xylenes	ND	1.1	ND	4.8	D1
o-Xylene	ND	1.1	ND	4.8	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.7	D1
Xylene (total)	ND	2.2	ND	9.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-001	Diln Fac:	2.790
Lab ID:	214752-013	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.4	ND	6.9	D2
Vinyl Chloride	ND	1.4	ND	3.6	D2
Chloroethane	ND	1.4	ND	3.7	D2
Trichlorofluoromethane	4.5	1.4	25	7.8	D2
1,1-Dichloroethene	ND	1.4	ND	5.5	D2
Methylene Chloride	ND	1.4	ND	4.8	D2
Freon 113	13	1.4	100	11	D2
trans-1,2-Dichloroethene	ND	1.4	ND	5.5	D2
1,1-Dichloroethane	ND	1.4	ND	5.6	D2
MTBE	ND	1.4	ND	5.0	D2
cis-1,2-Dichloroethene	ND	1.4	ND	5.5	D2
n-Hexane	180	1.4	640	4.9	D2
Chloroform	ND	1.4	ND	6.8	D2
1,2-Dichloroethane	ND	1.4	ND	5.6	D2
1,1,1-Trichloroethane	2.3	1.4	13	7.6	D2
Benzene	27	1.4	86	4.5	D2
Carbon Tetrachloride	ND	1.4	ND	8.8	D2
1,4-Dioxane	ND	1.4	ND	5.0	D2
Trichloroethene	39	1.4	210	7.5	D2
Toluene	ND	1.4	ND	5.3	D2
Tetrachloroethene	6.6	1.4	45	9.5	D2
Ethylbenzene	ND	1.4	ND	6.1	D2
m,p-Xylenes	14	1.4	60	6.1	D2
o-Xylene	ND	1.4	ND	6.1	D2
1,3,5-Trimethylbenzene	3.3	1.4	16	6.9	D2
1,2,4-Trimethylbenzene	7.5	1.4	37	6.9	D2
1,4-Dichlorobenzene	ND	1.4	ND	8.4	D2
Xylene (total)	14	2.8	60	12	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-14-U-9Q3	Diln Fac:	2.020
Lab ID:	214752-014	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	9.4	1.0	47	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	3.9	1.0	22	5.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	1.3	1.0	10	7.7	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	2.0	1.0	7.0	3.6	D1
Chloroform	ND	1.0	ND	4.9	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	3.1	1.0	9.9	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.6	D1
Trichloroethene	ND	1.0	ND	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	8.9	1.0	60	6.9	D1
Ethylbenzene	4.1	1.0	18	4.4	D1
m,p-Xylenes	2.5	1.0	11	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	2.4	1.0	12	5.0	D1
1,2,4-Trimethylbenzene	14	1.0	67	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	2.5	2.0	11	8.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-14-M-9Q3	Diln Fac:	1.960
Lab ID:	214752-015	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	14	0.98	69	4.8	D1
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
Trichlorofluoromethane	6.0	0.98	34	5.5	D1
1,1-Dichloroethene	ND	0.98	ND	3.9	D1
Methylene Chloride	ND	0.98	ND	3.4	D1
Freon 113	2.1	0.98	16	7.5	D1
trans-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	ND	0.98	ND	4.0	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	1.7	0.98	6.6	3.9	D1
n-Hexane	1.7	0.98	6.1	3.5	D1
Chloroform	ND	0.98	ND	4.8	D1
1,2-Dichloroethane	ND	0.98	ND	4.0	D1
1,1,1-Trichloroethane	ND	0.98	ND	5.3	D1
Benzene	2.2	0.98	7.0	3.1	D1
Carbon Tetrachloride	ND	0.98	ND	6.2	D1
1,4-Dioxane	ND	0.98	ND	3.5	D1
Trichloroethene	ND	0.98	ND	5.3	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	10	0.98	69	6.6	D1
Ethylbenzene	3.5	0.98	15	4.3	D1
m,p-Xylenes	2.4	0.98	10	4.3	D1
o-Xylene	ND	0.98	ND	4.3	D1
1,3,5-Trimethylbenzene	2.3	0.98	11	4.8	D1
1,2,4-Trimethylbenzene	12	0.98	59	4.8	D1
1,4-Dichlorobenzene	ND	0.98	ND	5.9	D1
Xylene (total)	2.4	2.0	10	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-14-L-9Q3	Diln Fac:	1.940
Lab ID:	214752-016	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	7.0	0.97	35	4.8	D1
Vinyl Chloride	ND	0.97	ND	2.5	D1
Chloroethane	ND	0.97	ND	2.6	D1
Trichlorofluoromethane	11	0.97	63	5.4	D1
1,1-Dichloroethene	ND	0.97	ND	3.8	D1
Methylene Chloride	ND	0.97	ND	3.4	D1
Freon 113	2.8	0.97	22	7.4	D1
trans-1,2-Dichloroethene	ND	0.97	ND	3.8	D1
1,1-Dichloroethane	ND	0.97	ND	3.9	D1
MTBE	ND	0.97	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.97	ND	3.8	D1
n-Hexane	3.3	0.97	12	3.4	D1
Chloroform	1.0	0.97	5.0	4.7	D1
1,2-Dichloroethane	ND	0.97	ND	3.9	D1
1,1,1-Trichloroethane	ND	0.97	ND	5.3	D1
Benzene	5.4	0.97	17	3.1	D1
Carbon Tetrachloride	ND	0.97	ND	6.1	D1
1,4-Dioxane	ND	0.97	ND	3.5	D1
Trichloroethene	ND	0.97	ND	5.2	D1
Toluene	1.9	0.97	7.2	3.7	D1
Tetrachloroethene	14	0.97	92	6.6	D1
Ethylbenzene	4.4	0.97	19	4.2	D1
m,p-Xylenes	3.4	0.97	15	4.2	D1
o-Xylene	ND	0.97	ND	4.2	D1
1,3,5-Trimethylbenzene	2.7	0.97	13	4.8	D1
1,2,4-Trimethylbenzene	14	0.97	67	4.8	D1
1,4-Dichlorobenzene	ND	0.97	ND	5.8	D1
Xylene (total)	3.4	1.9	15	8.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-123A-9Q3	Diln Fac:	2.010
Lab ID:	214752-017	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	2.3	1.0	12	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	5.1	1.0	29	5.6	D1
1,1-Dichloroethene	8.3	1.0	33	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	2.6	1.0	20	7.7	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	6.3	1.0	25	4.0	D1
n-Hexane	2.0	1.0	7.1	3.5	D1
Chloroform	2.0	1.0	9.9	4.9	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	2.5	1.0	8.0	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.3	D1
1,4-Dioxane	ND	1.0	ND	3.6	D1
Trichloroethene	1.3	1.0	6.9	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	22	1.0	150	6.8	D1
Ethylbenzene	3.3	1.0	14	4.4	D1
m,p-Xylenes	4.1	1.0	18	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	2.1	1.0	10	4.9	D1
1,2,4-Trimethylbenzene	11	1.0	54	4.9	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.0	D1
Xylene (total)	4.1	2.0	18	8.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-122A-9Q3	Diln Fac:	2.020
Lab ID:	214752-018	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.3	1.0	6.4	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	1.9	1.0	11	5.7	D1
1,1-Dichloroethene	2.4	1.0	9.6	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	1.1	1.0	8.7	7.7	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	1.5	1.0	5.4	3.6	D1
Chloroform	ND	1.0	ND	4.9	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	2.0	1.0	6.4	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.6	D1
Trichloroethene	ND	1.0	ND	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	9.4	1.0	64	6.9	D1
Ethylbenzene	2.9	1.0	13	4.4	D1
m,p-Xylenes	1.9	1.0	8.1	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	2.0	1.0	9.7	5.0	D1
1,2,4-Trimethylbenzene	10	1.0	50	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	1.9	1.0	8.1	4.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-11-U-9Q3	Diln Fac:	1.890
Lab ID:	214752-019	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	8.2	0.95	41	4.7	D1
Vinyl Chloride	ND	0.95	ND	2.4	D1
Chloroethane	ND	0.95	ND	2.5	D1
Trichlorofluoromethane	6.0	0.95	34	5.3	D1
1,1-Dichloroethene	ND	0.95	ND	3.7	D1
Methylene Chloride	ND	0.95	ND	3.3	D1
Freon 113	4.1	0.95	31	7.2	D1
trans-1,2-Dichloroethene	ND	0.95	ND	3.7	D1
1,1-Dichloroethane	ND	0.95	ND	3.8	D1
MTBE	ND	0.95	ND	3.4	D1
cis-1,2-Dichloroethene	ND	0.95	ND	3.7	D1
n-Hexane	6.4	0.95	23	3.3	D1
Chloroform	ND	0.95	ND	4.6	D1
1,2-Dichloroethane	ND	0.95	ND	3.8	D1
1,1,1-Trichloroethane	ND	0.95	ND	5.2	D1
Benzene	2.8	0.95	9.0	3.0	D1
Carbon Tetrachloride	ND	0.95	ND	5.9	D1
1,4-Dioxane	ND	0.95	ND	3.4	D1
Trichloroethene	ND	0.95	ND	5.1	D1
Toluene	ND	0.95	ND	3.6	D1
Tetrachloroethene	1.6	0.95	11	6.4	D1
Ethylbenzene	9.0	0.95	39	4.1	D1
m,p-Xylenes	7.8	0.95	34	4.1	D1
o-Xylene	ND	0.95	ND	4.1	D1
1,3,5-Trimethylbenzene	6.2	0.95	30	4.6	D1
1,2,4-Trimethylbenzene	22	0.95	110	4.6	D1
1,4-Dichlorobenzene	ND	0.95	ND	5.7	D1
Xylene (total)	7.8	1.9	34	8.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	124	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-005	Diln Fac:	1.980
Lab ID:	214752-020	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/21/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	8.6	0.99	43	4.9	D1
Vinyl Chloride	ND	0.99	ND	2.5	D1
Chloroethane	ND	0.99	ND	2.6	D1
Trichlorofluoromethane	5.8	0.99	32	5.6	D1
1,1-Dichloroethene	ND	0.99	ND	3.9	D1
Methylene Chloride	ND	0.99	ND	3.4	D1
Freon 113	4.3	0.99	33	7.6	D1
trans-1,2-Dichloroethene	ND	0.99	ND	3.9	D1
1,1-Dichloroethane	ND	0.99	ND	4.0	D1
MTBE	ND	0.99	ND	3.6	D1
cis-1,2-Dichloroethene	ND	0.99	ND	3.9	D1
n-Hexane	4.7	0.99	17	3.5	D1
Chloroform	ND	0.99	ND	4.8	D1
1,2-Dichloroethane	ND	0.99	ND	4.0	D1
1,1,1-Trichloroethane	ND	0.99	ND	5.4	D1
Benzene	2.4	0.99	7.8	3.2	D1
Carbon Tetrachloride	ND	0.99	ND	6.2	D1
1,4-Dioxane	ND	0.99	ND	3.6	D1
Trichloroethene	ND	0.99	ND	5.3	D1
Toluene	ND	0.99	ND	3.7	D1
Tetrachloroethene	1.5	0.99	10	6.7	D1
Ethylbenzene	8.6	0.99	37	4.3	D1
m,p-Xylenes	7.0	0.99	30	4.3	D1
o-Xylene	ND	0.99	ND	4.3	D1
1,3,5-Trimethylbenzene	5.9	0.99	29	4.9	D1
1,2,4-Trimethylbenzene	21	0.99	110	4.9	D1
1,4-Dichlorobenzene	ND	0.99	ND	6.0	D1
Xylene (total)	7.0	2.0	30	8.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	109	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-11-M-9Q3	Diln Fac:	1.880
Lab ID:	214752-021	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/21/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	9.4	0.94	46	4.6	D1
Vinyl Chloride	ND	0.94	ND	2.4	D1
Chloroethane	ND	0.94	ND	2.5	D1
Trichlorofluoromethane	5.2	0.94	29	5.3	D1
1,1-Dichloroethene	ND	0.94	ND	3.7	D1
Methylene Chloride	ND	0.94	ND	3.3	D1
Freon 113	4.0	0.94	31	7.2	D1
trans-1,2-Dichloroethene	ND	0.94	ND	3.7	D1
1,1-Dichloroethane	ND	0.94	ND	3.8	D1
MTBE	ND	0.94	ND	3.4	D1
cis-1,2-Dichloroethene	ND	0.94	ND	3.7	D1
n-Hexane	3.9	0.94	14	3.3	D1
Chloroform	ND	0.94	ND	4.6	D1
1,2-Dichloroethane	ND	0.94	ND	3.8	D1
1,1,1-Trichloroethane	ND	0.94	ND	5.1	D1
Benzene	2.0	0.94	6.5	3.0	D1
Carbon Tetrachloride	ND	0.94	ND	5.9	D1
1,4-Dioxane	ND	0.94	ND	3.4	D1
Trichloroethene	ND	0.94	ND	5.1	D1
Toluene	ND	0.94	ND	3.5	D1
Tetrachloroethene	2.0	0.94	13	6.4	D1
Ethylbenzene	6.4	0.94	28	4.1	D1
m,p-Xylenes	5.6	0.94	24	4.1	D1
o-Xylene	ND	0.94	ND	4.1	D1
1,3,5-Trimethylbenzene	4.7	0.94	23	4.6	D1
1,2,4-Trimethylbenzene	17	0.94	83	4.6	D1
1,4-Dichlorobenzene	ND	0.94	ND	5.7	D1
Xylene (total)	5.6	1.9	24	8.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-11-L-9Q3	Diln Fac:	2.000
Lab ID:	214752-022	Batch#:	155096
Matrix:	Air	Sampled:	09/03/09
Units (V):	ppbv	Received:	09/09/09
Units (M):	ug/m3	Analyzed:	09/21/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	2.9	1.0	14	4.9	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.6	D1
Trichlorofluoromethane	3.4	1.0	19	5.6	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	1.6	1.0	12	7.7	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.0	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	6.3	1.0	22	3.5	D1
Chloroform	ND	1.0	ND	4.9	D1
1,2-Dichloroethane	ND	1.0	ND	4.0	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.5	D1
Benzene	1.9	1.0	5.9	3.2	D1
Carbon Tetrachloride	ND	1.0	ND	6.3	D1
1,4-Dioxane	ND	1.0	ND	3.6	D1
Trichloroethene	ND	1.0	ND	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	4.3	1.0	29	6.8	D1
Ethylbenzene	3.8	1.0	17	4.3	D1
m,p-Xylenes	3.9	1.0	17	4.3	D1
o-Xylene	ND	1.0	ND	4.3	D1
1,3,5-Trimethylbenzene	2.6	1.0	13	4.9	D1
1,2,4-Trimethylbenzene	10	1.0	51	4.9	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.0	D1
Xylene (total)	3.9	2.0	17	8.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC512649	Diln Fac:	1.000
Matrix:	Air	Batch#:	155061
Units (V):	ppbv	Analyzed:	09/18/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155061
Units (V):	ppbv	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512650

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.049	90	70-130	
Vinyl Chloride	10.00	7.712	77	70-130	
Chloroethane	10.00	9.722	97	70-130	
Trichlorofluoromethane	10.00	8.922	89	70-130	
1,1-Dichloroethene	10.00	9.299	93	70-130	
Methylene Chloride	10.00	9.382	94	70-130	
Freon 113	10.00	9.487	95	70-130	
trans-1,2-Dichloroethene	10.00	9.925	99	70-130	
1,1-Dichloroethane	10.00	9.174	92	70-130	
MTBE	10.00	9.416	94	70-130	
cis-1,2-Dichloroethene	10.00	8.645	86	70-130	
n-Hexane	10.00	9.321	93	70-130	
Chloroform	10.00	9.342	93	70-130	
1,2-Dichloroethane	10.00	9.019	90	70-130	
1,1,1-Trichloroethane	10.00	8.939	89	70-130	
Benzene	10.00	9.063	91	70-130	
Carbon Tetrachloride	10.00	8.082	81	70-130	
1,4-Dioxane	10.00	8.041	80	70-130	
Trichloroethene	10.00	8.993	90	70-130	
Toluene	10.00	8.941	89	70-130	
Tetrachloroethene	10.00	9.493	95	70-130	
Ethylbenzene	10.00	9.474	95	70-130	
m,p-Xylenes	20.00	19.16	96	70-130	
o-Xylene	10.00	9.525	95	70-130	
1,3,5-Trimethylbenzene	10.00	9.460	95	70-130	
1,2,4-Trimethylbenzene	10.00	9.644	96	70-130	
1,4-Dichlorobenzene	10.00	9.108	91	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155061
Units (V):	ppbv	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512651

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.863	89	70-130	2	25	
Vinyl Chloride	10.00	8.379	84	70-130	8	25	
Chloroethane	10.00	9.070	91	70-130	7	25	
Trichlorofluoromethane	10.00	8.749	87	70-130	2	25	
1,1-Dichloroethene	10.00	9.414	94	70-130	1	25	
Methylene Chloride	10.00	9.376	94	70-130	0	25	
Freon 113	10.00	9.504	95	70-130	0	25	
trans-1,2-Dichloroethene	10.00	9.715	97	70-130	2	25	
1,1-Dichloroethane	10.00	8.990	90	70-130	2	25	
MTBE	10.00	9.405	94	70-130	0	25	
cis-1,2-Dichloroethene	10.00	8.586	86	70-130	1	25	
n-Hexane	10.00	9.290	93	70-130	0	25	
Chloroform	10.00	9.222	92	70-130	1	25	
1,2-Dichloroethane	10.00	8.742	87	70-130	3	25	
1,1,1-Trichloroethane	10.00	8.913	89	70-130	0	25	
Benzene	10.00	9.267	93	70-130	2	25	
Carbon Tetrachloride	10.00	7.957	80	70-130	2	25	
1,4-Dioxane	10.00	8.201	82	70-130	2	25	
Trichloroethene	10.00	8.903	89	70-130	1	25	
Toluene	10.00	9.208	92	70-130	3	25	
Tetrachloroethene	10.00	9.266	93	70-130	2	25	
Ethylbenzene	10.00	9.628	96	70-130	2	25	
m,p-Xylenes	20.00	19.36	97	70-130	1	25	
o-Xylene	10.00	9.605	96	70-130	1	25	
1,3,5-Trimethylbenzene	10.00	9.646	96	70-130	2	25	
1,2,4-Trimethylbenzene	10.00	9.685	97	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.101	91	70-130	0	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC512781	Diln Fac:	1.000
Matrix:	Air	Batch#:	155096
Units (V):	ppbv	Analyzed:	09/20/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155096
Units (V):	ppbv	Analyzed:	09/20/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512782

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.202	92	70-130	
Vinyl Chloride	10.00	7.636	76	70-130	
Chloroethane	10.00	9.588	96	70-130	
Trichlorofluoromethane	10.00	8.640	86	70-130	
1,1-Dichloroethene	10.00	9.484	95	70-130	
Methylene Chloride	10.00	9.318	93	70-130	
Freon 113	10.00	9.401	94	70-130	
trans-1,2-Dichloroethene	10.00	10.31	103	70-130	
1,1-Dichloroethane	10.00	9.493	95	70-130	
MTBE	10.00	9.856	99	70-130	
cis-1,2-Dichloroethene	10.00	8.878	89	70-130	
n-Hexane	10.00	9.448	94	70-130	
Chloroform	10.00	9.397	94	70-130	
1,2-Dichloroethane	10.00	9.135	91	70-130	
1,1,1-Trichloroethane	10.00	8.921	89	70-130	
Benzene	10.00	9.020	90	70-130	
Carbon Tetrachloride	10.00	7.912	79	70-130	
1,4-Dioxane	10.00	8.051	81	70-130	
Trichloroethene	10.00	9.164	92	70-130	
Toluene	10.00	9.290	93	70-130	
Tetrachloroethene	10.00	9.962	100	70-130	
Ethylbenzene	10.00	9.678	97	70-130	
m,p-Xylenes	20.00	19.61	98	70-130	
o-Xylene	10.00	9.927	99	70-130	
1,3,5-Trimethylbenzene	10.00	9.686	97	70-130	
1,2,4-Trimethylbenzene	10.00	9.936	99	70-130	
1,4-Dichlorobenzene	10.00	9.196	92	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214752	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155096
Units (V):	ppbv	Analyzed:	09/20/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512783

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.287	93	70-130	1	25	
Vinyl Chloride	10.00	8.734	87	70-130	13	25	
Chloroethane	10.00	9.591	96	70-130	0	25	
Trichlorofluoromethane	10.00	8.858	89	70-130	2	25	
1,1-Dichloroethene	10.00	9.409	94	70-130	1	25	
Methylene Chloride	10.00	9.205	92	70-130	1	25	
Freon 113	10.00	9.576	96	70-130	2	25	
trans-1,2-Dichloroethene	10.00	10.13	101	70-130	2	25	
1,1-Dichloroethane	10.00	9.637	96	70-130	2	25	
MTBE	10.00	9.571	96	70-130	3	25	
cis-1,2-Dichloroethene	10.00	9.052	91	70-130	2	25	
n-Hexane	10.00	9.386	94	70-130	1	25	
Chloroform	10.00	9.602	96	70-130	2	25	
1,2-Dichloroethane	10.00	9.022	90	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.062	91	70-130	2	25	
Benzene	10.00	9.240	92	70-130	2	25	
Carbon Tetrachloride	10.00	7.866	79	70-130	1	25	
1,4-Dioxane	10.00	8.185	82	70-130	2	25	
Trichloroethene	10.00	9.241	92	70-130	1	25	
Toluene	10.00	8.991	90	70-130	3	25	
Tetrachloroethene	10.00	9.401	94	70-130	6	25	
Ethylbenzene	10.00	9.474	95	70-130	2	25	
m,p-Xylenes	20.00	19.17	96	70-130	2	25	
o-Xylene	10.00	9.429	94	70-130	5	25	
1,3,5-Trimethylbenzene	10.00	9.574	96	70-130	1	25	
1,2,4-Trimethylbenzene	10.00	9.537	95	70-130	4	25	
1,4-Dichlorobenzene	10.00	9.248	92	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214752 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214752 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209376751001 File : 261_001 Time : 18-SEP-2009 15:11

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	73590	11.00	
75	30% - 66% of mass 95	232871	34.79	
95		669290	100.00	
96	5% - 9% of mass 95	45915	6.86	
173	< 2% of mass 174	95	0.03	
174	50% - 120% of mass 95	360204	53.82	
175	4% - 9% of mass 174	28973	8.04	
176	93% - 101% of mass 174	358148	99.43	
177	5% - 9% of mass 176	20756	5.80	

CURTIS & TOMPKINS BFB TUNE FOR 214752 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209379435001 File : 263_001 Time : 20-SEP-2009 10:38

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	58229	9.92	
75	30% - 66% of mass 95	216566	36.90	
95		586916	100.00	
96	5% - 9% of mass 95	33631	5.73	
173	< 2% of mass 174	197	0.07	
174	50% - 120% of mass 95	302998	51.63	
175	4% - 9% of mass 174	20643	6.81	
176	93% - 101% of mass 174	295695	97.59	
177	5% - 9% of mass 176	21013	7.11	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214752 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	26	33.33	5	50.00	-7	100.0	-31
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	24	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	24	5.000	-12	10.00	-56	16.67	31	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	-39	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	-22
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	-25
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	-21
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	-22	1.667	0	5.000	-12	10.00	-8	16.67	23	33.33	30				
Trichloroethene	0.167	25	0.500	1	1.667	26	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	-21	100.0	-40
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	25	0.500	3	1.667	25	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	-28
Ethylbenzene	0.167	22	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	-31
m,p-Xylenes	0.333	26	1.000	8	3.333	22	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	-35
o-Xylene	0.167	31	0.500	5	1.667	25	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	-24	100.0	-33
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	22	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	-27
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	26	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	-30
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214752 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214752 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512650 IDF : 1.0
Seqnum : 1209376751002.3 File : 261_002 Time : 18-SEP-2009 16:09
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.6954	10.00	9.049	nL/L	-10	30	u
Vinyl Chloride	0.8099	0.6244	10.00	7.712	nL/L	-23	30	m u
Chloroethane	0.0783	0.0761	10.00	9.722	nL/L	-3	30	u
Trichlorofluoromethane	3.8163	3.4038	10.00	8.922	nL/L	-11	30	u
1,1-Dichloroethene	1.1450	1.0644	10.00	9.299	nL/L	-7	30	u
Methylene Chloride	0.7638	0.7166	10.00	9.382	nL/L	-6	30	u
Freon 113	2.6173	2.4823	10.00	9.487	nL/L	-5	30	u
trans-1,2-Dichloroethene	1.7822	1.7683	10.00	9.925	nL/L	-1	30	!v- u
1,1-Dichloroethane	2.2048	2.0221	10.00	9.174	nL/L	-8	30	u
MTBE	1.1668	1.0984	10.00	9.416	nL/L	-6	30	u
cis-1,2-Dichloroethene	2.0400	1.7631	10.00	8.645	nL/L	-14	30	u
n-Hexane	0.8500	0.7921	10.00	9.321	nL/L	-7	30	u
Chloroform	2.3937	2.2356	10.00	9.342	nL/L	-7	30	u
1,2-Dichloroethane	0.6592	0.5943	10.00	9.019	nL/L	-10	30	u
1,1,1-Trichloroethane	0.8700	0.7774	10.00	8.939	nL/L	-11	30	u
Benzene	0.4460	0.4041	10.00	9.063	nL/L	-9	30	u
Carbon Tetrachloride	1.0378	0.8385	10.00	8.082	nL/L	-19	30	u
1,4-Dioxane	0.1421	0.1142	10.00	8.041	nL/L	-20	30	!v- u
Trichloroethene	0.5119	0.4602	10.00	8.993	nL/L	-10	30	u
Toluene	1.5952	1.4259	10.00	8.941	nL/L	-11	30	u
Tetrachloroethene	0.5206	0.4941	10.00	9.493	nL/L	-5	30	u
Ethylbenzene	1.9165	1.8152	10.00	9.474	nL/L	-5	30	u
m,p-Xylenes	1.7645	1.6907	20.00	19.16	nL/L	-4	30	u
o-Xylene	1.6441	1.5655	10.00	9.525	nL/L	-5	30	u
1,3,5-Trimethylbenzene	2.1384	2.0223	10.00	9.460	nL/L	-5	30	u
1,2,4-Trimethylbenzene	2.0458	1.9724	10.00	9.644	nL/L	-4	30	u
1,4-Dichlorobenzene	1.3357	1.2162	10.00	9.108	nL/L	-9	30	u
Bromofluorobenzene	0.7384	0.7243	10.00	9.809	nL/L	-2	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	980036	-15.47	27.15	27.23	0.08
1,4-Difluorobenzene	4209375	3525856	-16.24	31.87	31.96	0.09
Chlorobenzene-d5	3611816	3123730	-13.51	41.74	41.81	0.07

SJD 09/23/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214752 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512782 IDF : 1.0
Seqnum : 1209379435002.1 File : 263_002 Time : 20-SEP-2009 11:55
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7411	10.00	9.202	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.6183	10.00	7.636	nL/L	-24	30	m u
Chloroethane	0.0783	0.0750	10.00	9.588	nL/L	-4	30	u
Trichlorofluoromethane	3.8163	3.2964	10.00	8.640	nL/L	-14	30	u
1,1-Dichloroethene	1.1450	1.0856	10.00	9.484	nL/L	-5	30	u
Methylene Chloride	0.7638	0.7117	10.00	9.318	nL/L	-7	30	u
Freon 113	2.6173	2.4599	10.00	9.401	nL/L	-6	30	u
trans-1,2-Dichloroethene	1.7822	1.8362	10.00	10.31	nL/L	3	30	!v- u
1,1-Dichloroethane	2.2048	2.0925	10.00	9.493	nL/L	-5	30	u
MTBE	1.1668	1.1497	10.00	9.856	nL/L	-1	30	u
cis-1,2-Dichloroethene	2.0400	1.8106	10.00	8.878	nL/L	-11	30	u
n-Hexane	0.8500	0.8028	10.00	9.448	nL/L	-6	30	u
Chloroform	2.3937	2.2487	10.00	9.397	nL/L	-6	30	u
1,2-Dichloroethane	0.6592	0.6020	10.00	9.135	nL/L	-9	30	u
1,1,1-Trichloroethane	0.8700	0.7759	10.00	8.921	nL/L	-11	30	u
Benzene	0.4460	0.4022	10.00	9.020	nL/L	-10	30	u
Carbon Tetrachloride	1.0378	0.8208	10.00	7.912	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1144	10.00	8.051	nL/L	-19	30	!v- u
Trichloroethene	0.5119	0.4690	10.00	9.164	nL/L	-8	30	u
Toluene	1.5952	1.4816	10.00	9.290	nL/L	-7	30	u
Tetrachloroethene	0.5206	0.5185	10.00	9.962	nL/L	0	30	u
Ethylbenzene	1.9165	1.8543	10.00	9.678	nL/L	-3	30	u
m,p-Xylenes	1.7645	1.7299	20.00	19.61	nL/L	-2	30	u
o-Xylene	1.6441	1.6317	10.00	9.927	nL/L	-1	30	u
1,3,5-Trimethylbenzene	2.1384	2.0706	10.00	9.686	nL/L	-3	30	u
1,2,4-Trimethylbenzene	2.0458	2.0322	10.00	9.936	nL/L	-1	30	u
1,4-Dichlorobenzene	1.3357	1.2280	10.00	9.196	nL/L	-8	30	u
Bromofluorobenzene	0.7384	0.7470	10.00	10.12	nL/L	1	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	929686	-19.82	27.15	27.17	0.02
1,4-Difluorobenzene	4209375	3388726	-19.50	31.87	31.90	0.03
Chlorobenzene-d5	3611816	2817890	-21.98	41.74	41.75	0.01

SJD 09/23/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209376751

Date : 09/18/09 Reference : 244_010
Sequence : MSAIR01 261 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC512650	980036	27.23	3525856	31.96	3123730	41.81
003	BSD	QC512651	983065	27.20	3521190	31.93	3062676	41.79
004	BLANK	QC512649	1064893	27.21	3646055	31.94	3257469	41.79
005	SAMPLE	214751-015	958505	27.20	3479234	31.92	2917749	41.78
006	SAMPLE	214751-016	926310	27.18	3331695	31.91	2826912	41.78
007	SAMPLE	214751-017	929883	27.19	3275413	31.92	2807779	41.78
008	SAMPLE	214751-018	925950	27.19	3286233	31.92	2730318	41.78
009	SAMPLE	214751-019	908582	27.19	3276951	31.92	2727128	41.78
010	SAMPLE	214752-001	900740	27.19	3254121	31.92	2659454	41.78
011	SAMPLE	214752-002	924041	27.20	3264600	31.93	2734325	41.78
012	SAMPLE	214752-003	926542	27.19	3324472	31.92	2787213	41.78
013	SAMPLE	214752-004	934230	27.19	3389071	31.92	2851966	41.79
014	SAMPLE	214752-005	940070	27.21	3379638	31.93	2841342	41.79
015	SAMPLE	214752-006	937603	27.20	3344829	31.93	2863091	41.79
016	SAMPLE	214752-007	972354	27.20	3405837	31.93	2968624	41.79
017	SAMPLE	214752-008	963477	27.20	3379264	31.93	2931478	41.79
018	SAMPLE	214752-009	947559	27.19	3382711	31.92	2905699	41.79
019	SAMPLE	214751-019	943722	27.20	3400863	31.93	2913139	41.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209379435

Date : 09/20/09 Reference : 244_010
Sequence : MSAIR01 263 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC512782	929686	27.17	3388726	31.90	2817890	41.75
003	BSD	QC512783	909077	27.19	3306653	31.92	2910354	41.78
004	BLANK	QC512781	1012888	27.21	3464790	31.94	3026484	41.79
005	SAMPLE	214752-010	936074	27.20	3356638	31.93	2921421	41.79
006	SAMPLE	214752-011	920188	27.20	3292950	31.93	2846891	41.79
007	SAMPLE	214752-012	934457	27.20	3270290	31.93	2886205	41.79
008	SAMPLE	214752-013	892670	27.20	3248508	31.93	2716156	41.79
009	SAMPLE	214752-014	896887	27.20	3193386	31.93	2606695	41.79
010	SAMPLE	214752-015	893230	27.20	3218386	31.92	2640101	41.78
011	SAMPLE	214752-016	880879	27.19	3149301	31.92	2599644	41.79
012	SAMPLE	214752-017	884013	27.20	3128065	31.93	2633525	41.79
013	SAMPLE	214752-018	888792	27.20	3202720	31.93	2647599	41.79
014	SAMPLE	214752-019	887562	27.20	3154026	31.93	2489625	41.79
015	SAMPLE	214752-020	916879	27.20	3262572	31.93	2604299	41.79
016	SAMPLE	214752-021	938554	27.20	3353974	31.93	2626325	41.79
017	SAMPLE	214752-022	942320	27.20	3351295	31.93	2694422	41.79
018	SAMPLE	214808-001	913259	27.20	3341869	31.93	2707348	41.79
019	SAMPLE	214808-002	918077	27.20	3263585	31.93	2492403	41.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209376751

Instrument : MSAIR01 Begun : 09/18/09 15:11
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	261_001	TUN	BFB			09/18/09 15:11	1.0	1	
002	261_002	CCV/BS	QC512650	Air	155061	09/18/09 16:09	1.0	2 1	
003	261_003	BSD	QC512651	Air	155061	09/18/09 17:07	1.0	2 1	
004	261_004	BLANK	QC512649	Air	155061	09/18/09 18:07	1.0	1	
005	261_005	SAMPLE	214751-015	Air	155061	09/18/09 19:07	2.03	1	
006	261_006	SAMPLE	214751-016	Air	155061	09/18/09 20:07	2.03	1	
007	261_007	SAMPLE	214751-017	Air	155061	09/18/09 21:07	2.07	1	
008	261_008	SAMPLE	214751-018	Air	155061	09/18/09 22:06	1.95	1	
009	261_009	SAMPLE	214751-019	Air	155061	09/18/09 23:06	2.02	1	1:DCA11=100
010	261_010	SAMPLE	214752-001	Air	155061	09/19/09 00:06	2.16	1	
011	261_011	SAMPLE	214752-002	Air	155061	09/19/09 01:06	2.82	1	
012	261_012	SAMPLE	214752-003	Air	155061	09/19/09 02:05	2.31	1	
013	261_013	SAMPLE	214752-004	Air	155061	09/19/09 03:04	2.03	1	
014	261_014	SAMPLE	214752-005	Air	155061	09/19/09 04:02	3.53	1	
015	261_015	SAMPLE	214752-006	Air	155061	09/19/09 05:01	2.82	1	
016	261_016	SAMPLE	214752-007	Air	155061	09/19/09 06:00	2.28	1	
017	261_017	SAMPLE	214752-008	Air	155061	09/19/09 06:59	2.73	1	
018	261_018	SAMPLE	214752-009	Air	155061	09/19/09 07:58	2.68	1	
019	261_019	SAMPLE	214751-019	Air	155061	09/19/09 14:14	4.04	1	

SJD 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

Analyst: SJD Date: 09/23/09 Reviewer: BO Date: 09/23/09

Standards used: 1=S12824 2=S12815

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209379435

Instrument : MSAIR01 Begun : 09/20/09 10:38
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	263_001	TUN	BFB			09/20/09 10:38	1.0	1
002	263_002	CCV/BS	QC512782	Air	155096	09/20/09 11:55	1.0	2 1
003	263_003	BSD	QC512783	Air	155096	09/20/09 12:55	1.0	2 1
004	263_004	BLANK	QC512781	Air	155096	09/20/09 13:55	1.0	1
005	263_005	SAMPLE	214752-010	Air	155096	09/20/09 14:55	1.96	1
006	263_006	SAMPLE	214752-011	Air	155096	09/20/09 15:55	1.95	1
007	263_007	SAMPLE	214752-012	Air	155096	09/20/09 16:55	2.22	1
008	263_008	SAMPLE	214752-013	Air	155096	09/20/09 17:55	2.79	1
009	263_009	SAMPLE	214752-014	Air	155096	09/20/09 18:55	2.02	1
010	263_010	SAMPLE	214752-015	Air	155096	09/20/09 19:55	1.96	1
011	263_011	SAMPLE	214752-016	Air	155096	09/20/09 20:55	1.94	1
012	263_012	SAMPLE	214752-017	Air	155096	09/20/09 21:55	2.01	1
013	263_013	SAMPLE	214752-018	Air	155096	09/20/09 22:55	2.02	1
014	263_014	SAMPLE	214752-019	Air	155096	09/20/09 23:55	1.89	1
015	263_015	SAMPLE	214752-020	Air	155096	09/21/09 00:54	1.98	1
016	263_016	SAMPLE	214752-021	Air	155096	09/21/09 01:54	1.88	1
017	263_017	SAMPLE	214752-022	Air	155096	09/21/09 02:54	2.0	1
018	263_018	SAMPLE	214808-001	Air	155096	09/21/09 03:53	1.86	1
019	263_019	SAMPLE	214808-002	Air	155096	09/21/09 04:53	2.06	1

SJD 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

BO 09/23/09 : Matrix spikes were not performed for this analysis in batch 155096 because they are not required by the method.

Analyst: SJD Date: 09/23/09 Reviewer: BO Date: 09/23/09

Standards used: 1=S12824 2=S12815

Page 1 of 1

PROJECT

Notebook No.

Continued From Page

Prepared by / Date	Sample ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
SOS 9/1/09	214496-001	C00135	14.52	23.14	1.59x	
	-002	C00141	14.39	23.09	1.60x	
	-003	C00194	14.56	23.18	1.59x	
	-004	C00115	14.09	23.04	1.64x	
	-005	C00186	14.48	23.13	1.60x	
	214444-001	C00174	10.09	23.29	2.31x	
	BLANK	C1699	—	—	1x	
SOS 9/3/09	214496-001	C00218	1.5 added	30.0 total added	31.8	20x of 1.59x can C00135
	-002	C00040			32.0x	20x of 1.60x can C00141
	-003	C00007			~~31.8~~ 31.8x SOS 9/3/09	20x of 1.59x can C00194
	-004	C00199			32.8x	20x of 1.64x can C00115
	-005	C00022			32.0x	20x of 1.60x can C00186
	BLANK	C1703	—	—	1x	
ASS 9/15/09	214751-001	C00100	11.38	23.33	2.05x	
	-002	C00191	11.25	23.76	2.11x	
	-003	C00137	11.24	23.14	2.06x	
	-004	C00155	11.32	23.67	2.09x	
	-005	C00196	11.39	23.27	2.04x	
	-006	C00156	11.17	23.50	2.10x	
	-007	C00067	10.90	23.06	2.12x	
	-008	C00061	11.12	22.92	2.06x	
	-009	C00122	11.17	23.10	2.07x	
	-010	C00121	11.07	23.14	2.09x	
	-011	C00185	11.48	23.19	2.02x	
	-012	C00171	11.20	23.23	2.07x	
	-013	C00166	11.19	23.37	2.09x	
	-014	C00188	11.27	23.36	2.07x	
	BLANK	C1703	1x	1x		
	214906-001	C00093	7.61	24.57	3.23x	
ASS 9/16/09	214751-015	C00149	11.29	22.97	2.03x	
	016	C00053	11.30	22.95	2.03x	
	017	C00154	11.60	24.00	2.07x	
	018	C00143	11.49	22.40	1.95x	
	019	C00117	11.50	23.25	2.02x	

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Read and Understood By

Signed | Date | Signed | Date

PROJECT _____

Continued From Page _____

Prep on by Date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
Apr 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.13	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
Apr 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
Sto 9/16/09	BLANK	C1P05	~~1x~~ 50	~~1~~ 50	1.0x	
Apr 9/18/09	214752-010	C00070	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00184	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00060	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00084	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank				1.0x	
Apr 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

PROJECT _____

Continued From Page _____

Prep or Analy Date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
Prep 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.43	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
Prep 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
Sto 9/16/09	BLANK	C1205	1x 59	1 50	60x	
Prep 9/18/09	214752-010	C00070	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00154	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00060	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00084	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank				1.0x	
Anly 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214807
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE QTR SVM
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
PMW-8-U-9Q3	214807-001
PMW-8-M-9Q3	214807-002
PMW-4-U-9Q3	214807-003
PMW-4-M-9Q3	214807-004
PMW-5-U-9Q3	214807-005
PMW-5-M-9Q3	214807-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214807**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE QTR SVM**
Request Date:	**09/10/09**
Samples Received:	**09/10/09**

This data package contains sample and QC results for six air samples, requested for the above referenced project on 09/10/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
Many samples were diluted due to passive grab sampling.

No other analytical problems were encountered.

Chain of Custody

714807

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: Irail Cortinas-Lopez
PO # 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
1	PMW-8-U	5	10	PMW-8-U-9Q3	090409	1424	AIR	AIR	REG	1	G	N	X				178
2	PMW-8-M	20	25	PMW-8-M-9Q3	090409	1443	AIR	AIR	REG	1	G	N	X				125
3	PMW-4-U	5	10	PMW-4-U-9Q3	090409	1605	AIR	AIR	REG	1	G	N	X				145
4	PMW-4-M	20	25	PMW-4-M-9Q3	090409	1625	AIR	AIR	REG	1	G	N	X				130
5	PMW-5-U	5	10	PMW-5-U-9Q3	090909	0952	AIR	AIR	REG	1	G	N	X				104
6	PMW-5-M	20	25	PMW-5-M-9Q3	090509	1010	AIR	AIR	REG	1	G	N	X				158
7																	
8																	
9																	
10																	
11																	
12																	

Relinquished by: Irail Cortinas Lopez	Company: CH2MHILL	Received by: Fed Ex	Company		Condition		Custody Seals Intact
	Date/Time: 9/8/09 1700		Date/Time		Cooler Temp.		
Relinquished by	Company	Received by: [signature]	Company		Condition		Custody Seals Intact
	Date/Time		9/10/09 Date/Time		Cooler Temp.		

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214807 Date Received 9-10-9 Number of coolers 1 BX
Client CHEMTAZ Project Honeywell

Date Opened 9-10-9 By (print) SEVAIS (sign)
Date Logged in 9-11-9 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) FedEx YES NO
   Shipping info 7994 2849 3463

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are samples in the appropriate containers for indicated tests? _____ YES NO
11. Are sample labels present, in good condition and complete? _____ YES NO
12. Do the sample labels agree with custody papers? _____ YES NO
13. Was sufficient amount of sample sent for tests requested? _____ YES NO
14. Are the samples appropriately preserved? _____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Laboratory Job Number 214807

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-8-U-9Q3	Diln Fac:	2.480
Lab ID:	214807-001	Batch#:	155123
Matrix:	Air	Sampled:	09/04/09
Units (V):	ppbv	Received:	09/10/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.2	ND	6.1	D1
Vinyl Chloride	ND	1.2	ND	3.2	D1
Chloroethane	ND	1.2	ND	3.3	D1
Trichlorofluoromethane	ND	1.2	ND	7.0	D1
1,1-Dichloroethene	ND	1.2	ND	4.9	D1
Methylene Chloride	ND	1.2	ND	4.3	D1
Freon 113	ND	1.2	ND	9.5	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.9	D1
1,1-Dichloroethane	ND	1.2	ND	5.0	D1
MTBE	ND	1.2	ND	4.5	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.9	D1
n-Hexane	19	1.2	68	4.4	D1
Chloroform	ND	1.2	ND	6.1	D1
1,2-Dichloroethane	ND	1.2	ND	5.0	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.8	D1
Benzene	ND	1.2	ND	4.0	D1
Carbon Tetrachloride	ND	1.2	ND	7.8	D1
1,4-Dioxane	ND	1.2	ND	4.5	D1
Trichloroethene	ND	1.2	ND	6.7	D1
Toluene	ND	1.2	ND	4.7	D1
Tetrachloroethene	ND	1.2	ND	8.4	D1
Ethylbenzene	ND	1.2	ND	5.4	D1
m,p-Xylenes	2.5	1.2	11	5.4	D1
o-Xylene	ND	1.2	ND	5.4	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	6.1	D1
1,2,4-Trimethylbenzene	2.2	1.2	11	6.1	D1
1,4-Dichlorobenzene	ND	1.2	ND	7.5	D1
Xylene (total)	2.5	2.5	11	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-8-M-9Q3	Diln Fac:	3.030
Lab ID:	214807-002	Batch#:	155123
Matrix:	Air	Sampled:	09/04/09
Units (V):	ppbv	Received:	09/10/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.5	ND	7.5	D1
Vinyl Chloride	ND	1.5	ND	3.9	D1
Chloroethane	ND	1.5	ND	4.0	D1
Trichlorofluoromethane	ND	1.5	ND	8.5	D1
1,1-Dichloroethene	ND	1.5	ND	6.0	D1
Methylene Chloride	ND	1.5	ND	5.3	D1
Freon 113	ND	1.5	ND	12	D1
trans-1,2-Dichloroethene	ND	1.5	ND	6.0	D1
1,1-Dichloroethane	ND	1.5	ND	6.1	D1
MTBE	ND	1.5	ND	5.5	D1
cis-1,2-Dichloroethene	ND	1.5	ND	6.0	D1
n-Hexane	7.8	1.5	27	5.3	D1
Chloroform	3.5	1.5	17	7.4	D1
1,2-Dichloroethane	ND	1.5	ND	6.1	D1
1,1,1-Trichloroethane	ND	1.5	ND	8.3	D1
Benzene	1.5	1.5	4.9	4.8	D1
Carbon Tetrachloride	ND	1.5	ND	9.5	D1
1,4-Dioxane	ND	1.5	ND	5.5	D1
Trichloroethene	2.2	1.5	12	8.1	D1
Toluene	ND	1.5	ND	5.7	D1
Tetrachloroethene	ND	1.5	ND	10	D1
Ethylbenzene	ND	1.5	ND	6.6	D1
m,p-Xylenes	2.4	1.5	10	6.6	D1
o-Xylene	ND	1.5	ND	6.6	D1
1,3,5-Trimethylbenzene	ND	1.5	ND	7.4	D1
1,2,4-Trimethylbenzene	2.8	1.5	14	7.4	D1
1,4-Dichlorobenzene	ND	1.5	ND	9.1	D1
Xylene (total)	2.4	1.5	10	6.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-4-U-9Q3	Diln Fac:	3.040
Lab ID:	214807-003	Batch#:	155175
Matrix:	Air	Sampled:	09/04/09
Units (V):	ppbv	Received:	09/10/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.5	ND	7.5	D1
Vinyl Chloride	ND	1.5	ND	3.9	D1
Chloroethane	ND	1.5	ND	4.0	D1
Trichlorofluoromethane	ND	1.5	ND	8.5	D1
1,1-Dichloroethene	ND	1.5	ND	6.0	D1
Methylene Chloride	ND	1.5	ND	5.3	D1
Freon 113	ND	1.5	ND	12	D1
trans-1,2-Dichloroethene	ND	1.5	ND	6.0	D1
1,1-Dichloroethane	ND	1.5	ND	6.2	D1
MTBE	ND	1.5	ND	5.5	D1
cis-1,2-Dichloroethene	ND	1.5	ND	6.0	D1
n-Hexane	2.8	1.5	9.8	5.4	D1
Chloroform	79	1.5	390	7.4	D1
1,2-Dichloroethane	ND	1.5	ND	6.2	D1
1,1,1-Trichloroethane	2.7	1.5	14	8.3	D1
Benzene	7.6	1.5	24	4.9	D1
Carbon Tetrachloride	ND	1.5	ND	9.6	D1
1,4-Dioxane	ND	1.5	ND	5.5	D1
Trichloroethene	ND	1.5	ND	8.2	D1
Toluene	ND	1.5	ND	5.7	D1
Tetrachloroethene	ND	1.5	ND	10	D1
Ethylbenzene	ND	1.5	ND	6.6	D1
m,p-Xylenes	ND	1.5	ND	6.6	D1
o-Xylene	ND	1.5	ND	6.6	D1
1,3,5-Trimethylbenzene	ND	1.5	ND	7.5	D1
1,2,4-Trimethylbenzene	ND	1.5	ND	7.5	D1
1,4-Dichlorobenzene	ND	1.5	ND	9.1	D1
Xylene (total)	ND	3.0	ND	13	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-4-M-9Q3	Diln Fac:	2.340
Lab ID:	214807-004	Batch#:	155175
Matrix:	Air	Sampled:	09/04/09
Units (V):	ppbv	Received:	09/10/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.2	ND	5.8	D1
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.1	D1
Trichlorofluoromethane	ND	1.2	ND	6.6	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
Methylene Chloride	ND	1.2	ND	4.1	D1
Freon 113	ND	1.2	ND	9.0	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	ND	1.2	ND	4.1	D1
Chloroform	4.4	1.2	22	5.7	D1
1,2-Dichloroethane	ND	1.2	ND	4.7	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.4	D1
Benzene	ND	1.2	ND	3.7	D1
Carbon Tetrachloride	ND	1.2	ND	7.4	D1
1,4-Dioxane	ND	1.2	ND	4.2	D1
Trichloroethene	ND	1.2	ND	6.3	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	ND	1.2	ND	7.9	D1
Ethylbenzene	ND	1.2	ND	5.1	D1
m,p-Xylenes	ND	1.2	ND	5.1	D1
o-Xylene	ND	1.2	ND	5.1	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	5.8	D1
1,2,4-Trimethylbenzene	ND	1.2	ND	5.8	D1
1,4-Dichlorobenzene	ND	1.2	ND	7.0	D1
Xylene (total)	ND	2.3	ND	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-5-U-9Q3	Diln Fac:	2.640
Lab ID:	214807-005	Batch#:	155175
Matrix:	Air	Sampled:	09/05/09
Units (V):	ppbv	Received:	09/10/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.3	ND	6.5	D1
Vinyl Chloride	ND	1.3	ND	3.4	D1
Chloroethane	ND	1.3	ND	3.5	D1
Trichlorofluoromethane	ND	1.3	ND	7.4	D1
1,1-Dichloroethene	ND	1.3	ND	5.2	D1
Methylene Chloride	ND	1.3	ND	4.6	D1
Freon 113	ND	1.3	ND	10	D1
trans-1,2-Dichloroethene	ND	1.3	ND	5.2	D1
1,1-Dichloroethane	ND	1.3	ND	5.3	D1
MTBE	ND	1.3	ND	4.8	D1
cis-1,2-Dichloroethene	ND	1.3	ND	5.2	D1
n-Hexane	1.7	1.3	6.0	4.7	D1
Chloroform	ND	1.3	ND	6.4	D1
1,2-Dichloroethane	ND	1.3	ND	5.3	D1
1,1,1-Trichloroethane	ND	1.3	ND	7.2	D1
Benzene	14	1.3	43	4.2	D1
Carbon Tetrachloride	ND	1.3	ND	8.3	D1
1,4-Dioxane	ND	1.3	ND	4.8	D1
Trichloroethene	ND	1.3	ND	7.1	D1
Toluene	ND	1.3	ND	5.0	D1
Tetrachloroethene	2.6	1.3	17	9.0	D1
Ethylbenzene	ND	1.3	ND	5.7	D1
m,p-Xylenes	ND	1.3	ND	5.7	D1
o-Xylene	ND	1.3	ND	5.7	D1
1,3,5-Trimethylbenzene	ND	1.3	ND	6.5	D1
1,2,4-Trimethylbenzene	1.5	1.3	7.5	6.5	D1
1,4-Dichlorobenzene	ND	1.3	ND	7.9	D1
Xylene (total)	ND	2.6	ND	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-5-M-9Q3	Diln Fac:	2.110
Lab ID:	214807-006	Batch#:	155175
Matrix:	Air	Sampled:	09/05/09
Units (V):	ppbv	Received:	09/10/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.2	D1
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	ND	1.1	ND	5.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
Methylene Chloride	ND	1.1	ND	3.7	D1
Freon 113	ND	1.1	ND	8.1	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.7	D1
Chloroform	ND	1.1	ND	5.2	D1
1,2-Dichloroethane	ND	1.1	ND	4.3	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.8	D1
Benzene	1.5	1.1	4.7	3.4	D1
Carbon Tetrachloride	ND	1.1	ND	6.6	D1
1,4-Dioxane	ND	1.1	ND	3.8	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	2.5	1.1	17	7.2	D1
Ethylbenzene	ND	1.1	ND	4.6	D1
m,p-Xylenes	ND	1.1	ND	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.2	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.2	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.3	D1
Xylene (total)	ND	2.1	ND	9.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC512899	Diln Fac:	1.000
Matrix:	Air	Batch#:	155123
Units (V):	ppbv	Analyzed:	09/21/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155123
Units (V):	ppbv	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512900

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.222	92	70-130	
Vinyl Chloride	10.00	7.818	78	70-130	
Chloroethane	10.00	9.516	95	70-130	
Trichlorofluoromethane	10.00	8.725	87	70-130	
1,1-Dichloroethene	10.00	9.272	93	70-130	
Methylene Chloride	10.00	9.349	93	70-130	
Freon 113	10.00	9.397	94	70-130	
trans-1,2-Dichloroethene	10.00	10.26	103	70-130	
1,1-Dichloroethane	10.00	9.400	94	70-130	
MTBE	10.00	9.823	98	70-130	
cis-1,2-Dichloroethene	10.00	9.188	92	70-130	
n-Hexane	10.00	9.211	92	70-130	
Chloroform	10.00	9.449	94	70-130	
1,2-Dichloroethane	10.00	9.230	92	70-130	
1,1,1-Trichloroethane	10.00	9.176	92	70-130	
Benzene	10.00	9.287	93	70-130	
Carbon Tetrachloride	10.00	7.858	79	70-130	
1,4-Dioxane	10.00	8.154	82	70-130	
Trichloroethene	10.00	9.338	93	70-130	
Toluene	10.00	9.331	93	70-130	
Tetrachloroethene	10.00	9.635	96	70-130	
Ethylbenzene	10.00	9.520	95	70-130	
m,p-Xylenes	20.00	19.63	98	70-130	
o-Xylene	10.00	9.588	96	70-130	
1,3,5-Trimethylbenzene	10.00	9.630	96	70-130	
1,2,4-Trimethylbenzene	10.00	9.853	99	70-130	
1,4-Dichlorobenzene	10.00	9.421	94	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155123
Units (V):	ppbv	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512901

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.930	89	70-130	3	25	
Vinyl Chloride	10.00	8.713	87	70-130	11	25	
Chloroethane	10.00	9.153	92	70-130	4	25	
Trichlorofluoromethane	10.00	8.572	86	70-130	2	25	
1,1-Dichloroethene	10.00	9.131	91	70-130	2	25	
Methylene Chloride	10.00	9.104	91	70-130	3	25	
Freon 113	10.00	9.229	92	70-130	2	25	
trans-1,2-Dichloroethene	10.00	9.980	100	70-130	3	25	
1,1-Dichloroethane	10.00	9.535	95	70-130	1	25	
MTBE	10.00	9.718	97	70-130	1	25	
cis-1,2-Dichloroethene	10.00	8.808	88	70-130	4	25	
n-Hexane	10.00	9.363	94	70-130	2	25	
Chloroform	10.00	9.363	94	70-130	1	25	
1,2-Dichloroethane	10.00	9.192	92	70-130	0	25	
1,1,1-Trichloroethane	10.00	8.993	90	70-130	2	25	
Benzene	10.00	9.600	96	70-130	3	25	
Carbon Tetrachloride	10.00	7.762	78	70-130	1	25	
1,4-Dioxane	10.00	7.878	79	70-130	3	25	
Trichloroethene	10.00	9.064	91	70-130	3	25	
Toluene	10.00	9.377	94	70-130	0	25	
Tetrachloroethene	10.00	9.961	100	70-130	3	25	
Ethylbenzene	10.00	9.692	97	70-130	2	25	
m,p-Xylenes	20.00	19.61	98	70-130	0	25	
o-Xylene	10.00	9.713	97	70-130	1	25	
1,3,5-Trimethylbenzene	10.00	10.04	100	70-130	4	25	
1,2,4-Trimethylbenzene	10.00	9.832	98	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.477	95	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513102	Diln Fac:	1.000
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513103

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.154	92	70-130	
Vinyl Chloride	10.00	7.688	77	70-130	
Chloroethane	10.00	9.296	93	70-130	
Trichlorofluoromethane	10.00	8.596	86	70-130	
1,1-Dichloroethene	10.00	9.146	91	70-130	
Methylene Chloride	10.00	9.274	93	70-130	
Freon 113	10.00	9.295	93	70-130	
trans-1,2-Dichloroethene	10.00	9.991	100	70-130	
1,1-Dichloroethane	10.00	9.414	94	70-130	
MTBE	10.00	9.600	96	70-130	
cis-1,2-Dichloroethene	10.00	8.890	89	70-130	
n-Hexane	10.00	9.140	91	70-130	
Chloroform	10.00	9.299	93	70-130	
1,2-Dichloroethane	10.00	9.197	92	70-130	
1,1,1-Trichloroethane	10.00	9.142	91	70-130	
Benzene	10.00	9.089	91	70-130	
Carbon Tetrachloride	10.00	7.852	79	70-130	
1,4-Dioxane	10.00	8.072	81	70-130	
Trichloroethene	10.00	9.130	91	70-130	
Toluene	10.00	9.748	97	70-130	
Tetrachloroethene	10.00	10.03	100	70-130	
Ethylbenzene	10.00	9.957	100	70-130	
m,p-Xylenes	20.00	20.22	101	70-130	
o-Xylene	10.00	10.30	103	70-130	
1,3,5-Trimethylbenzene	10.00	9.996	100	70-130	
1,2,4-Trimethylbenzene	10.00	10.07	101	70-130	
1,4-Dichlorobenzene	10.00	9.529	95	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214807	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513104

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.986	90	70-130	2	25	
Vinyl Chloride	10.00	8.741	87	70-130	13	25	
Chloroethane	10.00	9.328	93	70-130	0	25	
Trichlorofluoromethane	10.00	8.740	87	70-130	2	25	
1,1-Dichloroethene	10.00	9.227	92	70-130	1	25	
Methylene Chloride	10.00	9.343	93	70-130	1	25	
Freon 113	10.00	9.317	93	70-130	0	25	
trans-1,2-Dichloroethene	10.00	10.06	101	70-130	1	25	
1,1-Dichloroethane	10.00	9.379	94	70-130	0	25	
MTBE	10.00	9.603	96	70-130	0	25	
cis-1,2-Dichloroethene	10.00	8.817	88	70-130	1	25	
n-Hexane	10.00	9.296	93	70-130	2	25	
Chloroform	10.00	9.237	92	70-130	1	25	
1,2-Dichloroethane	10.00	9.135	91	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.049	90	70-130	1	25	
Benzene	10.00	9.285	93	70-130	2	25	
Carbon Tetrachloride	10.00	7.833	78	70-130	0	25	
1,4-Dioxane	10.00	8.392	84	70-130	4	25	
Trichloroethene	10.00	9.385	94	70-130	3	25	
Toluene	10.00	9.140	91	70-130	6	25	
Tetrachloroethene	10.00	9.632	96	70-130	4	25	
Ethylbenzene	10.00	9.797	98	70-130	2	25	
m,p-Xylenes	20.00	19.44	97	70-130	4	25	
o-Xylene	10.00	9.616	96	70-130	7	25	
1,3,5-Trimethylbenzene	10.00	9.542	95	70-130	5	25	
1,2,4-Trimethylbenzene	10.00	9.571	96	70-130	5	25	
1,4-Dichlorobenzene	10.00	9.238	92	70-130	3	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214807 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214807 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209380829001 File : 264_001 Time : 21-SEP-2009 11:09

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62344	11.01	
75	30% - 66% of mass 95	212663	37.54	
95		566446	100.00	
96	5% - 9% of mass 95	38425	6.78	
173	< 2% of mass 174	623	0.18	
174	50% - 120% of mass 95	337318	59.55	
175	4% - 9% of mass 174	21937	6.50	
176	93% - 101% of mass 174	315337	93.48	
177	5% - 9% of mass 176	20382	6.46	

CURTIS & TOMPKINS BFB TUNE FOR 214807 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209382479000 File : 265 Time : 22-SEP-2009 14:39

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	56201	10.95	
75	30% - 66% of mass 95	189443	36.93	
95		513040	100.00	
96	5% - 9% of mass 95	27004	5.26	
173	< 2% of mass 174	1181	0.43	
174	50% - 120% of mass 95	276278	53.85	
175	4% - 9% of mass 174	17407	6.30	
176	93% - 101% of mass 174	259608	93.97	
177	5% - 9% of mass 176	14307	5.51	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214807 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	26	33.33	5	50.00	-7	100.0	-31
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	24	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	24	5.000	-12	10.00	-56	16.67	31	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	-39	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	-22
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	-25
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	-21
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	-22	1.667	0	5.000	-12	10.00	-8	16.67	23	33.33	30				
Trichloroethene	0.167	25	0.500	1	1.667	26	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	-21	100.0	-40
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	25	0.500	3	1.667	25	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	-28
Ethylbenzene	0.167	22	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	-31
m,p-Xylenes	0.333	26	1.000	8	3.333	22	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	-35
o-Xylene	0.167	31	0.500	5	1.667	25	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	-24	100.0	-33
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	22	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	-27
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	26	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	-30
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214807 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214807 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512900 IDF : 1.0
Seqnum : 1209380829002.2 File : 264_002 Time : 21-SEP-2009 12:19
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7470	10.00	9.222	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.6330	10.00	7.818	nL/L	-22	30	u
Chloroethane	0.0783	0.0745	10.00	9.516	nL/L	-5	30	u
Trichlorofluoromethane	3.8163	3.3289	10.00	8.725	nL/L	-13	30	u
1,1-Dichloroethene	1.1450	1.0614	10.00	9.272	nL/L	-7	30	u
Methylene Chloride	0.7638	0.7141	10.00	9.349	nL/L	-7	30	u
Freon 113	2.6173	2.4588	10.00	9.397	nL/L	-6	30	u
trans-1,2-Dichloroethene	1.7822	1.8285	10.00	10.26	nL/L	3	30	!v- u
1,1-Dichloroethane	2.2048	2.0720	10.00	9.400	nL/L	-6	30	u
MTBE	1.1668	1.1459	10.00	9.823	nL/L	-2	30	u
cis-1,2-Dichloroethene	2.0400	1.8738	10.00	9.188	nL/L	-8	30	u
n-Hexane	0.8500	0.7827	10.00	9.211	nL/L	-8	30	u
Chloroform	2.3937	2.2613	10.00	9.449	nL/L	-6	30	u
1,2-Dichloroethane	0.6592	0.6082	10.00	9.230	nL/L	-8	30	u
1,1,1-Trichloroethane	0.8700	0.7981	10.00	9.176	nL/L	-8	30	u
Benzene	0.4460	0.4141	10.00	9.287	nL/L	-7	30	u
Carbon Tetrachloride	1.0378	0.8153	10.00	7.858	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1159	10.00	8.154	nL/L	-18	30	!v- u
Trichloroethene	0.5119	0.4779	10.00	9.338	nL/L	-7	30	u
Toluene	1.5952	1.4879	10.00	9.331	nL/L	-7	30	u
Tetrachloroethene	0.5206	0.5015	10.00	9.635	nL/L	-4	30	u
Ethylbenzene	1.9165	1.8240	10.00	9.520	nL/L	-5	30	u
m,p-Xylenes	1.7645	1.7323	20.00	19.63	nL/L	-2	30	m u
o-Xylene	1.6441	1.5759	10.00	9.588	nL/L	-4	30	u
1,3,5-Trimethylbenzene	2.1384	2.0588	10.00	9.630	nL/L	-4	30	u
1,2,4-Trimethylbenzene	2.0458	2.0151	10.00	9.853	nL/L	-1	30	u
1,4-Dichlorobenzene	1.3357	1.2581	10.00	9.421	nL/L	-6	30	u
Bromofluorobenzene	0.7384	0.6991	10.00	9.468	nL/L	-5	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	932738	-19.55	27.15	27.18	0.03
1,4-Difluorobenzene	4209375	3345595	-20.52	31.87	31.91	0.04
Chlorobenzene-d5	3611816	2871756	-20.49	41.74	41.76	0.02

SJD 09/23/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214807 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC513103 IDF : 1.0
Seqnum : 1209382479002.1 File : 265_002 Time : 22-SEP-2009 15:40
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7266	10.00	9.154	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.6225	10.00	7.688	nL/L	-23	30	u
Chloroethane	0.0783	0.0728	10.00	9.296	nL/L	-7	30	u
Trichlorofluoromethane	3.8163	3.2795	10.00	8.596	nL/L	-14	30	u
1,1-Dichloroethene	1.1450	1.0470	10.00	9.146	nL/L	-9	30	u
Methylene Chloride	0.7638	0.7083	10.00	9.274	nL/L	-7	30	u
Freon 113	2.6173	2.4322	10.00	9.295	nL/L	-7	30	u
trans-1,2-Dichloroethene	1.7822	1.7801	10.00	9.991	nL/L	0	30	!v- u
1,1-Dichloroethane	2.2048	2.0750	10.00	9.414	nL/L	-6	30	u
MTBE	1.1668	1.1199	10.00	9.600	nL/L	-4	30	u
cis-1,2-Dichloroethene	2.0400	1.8131	10.00	8.890	nL/L	-11	30	u
n-Hexane	0.8500	0.7767	10.00	9.140	nL/L	-9	30	u
Chloroform	2.3937	2.2253	10.00	9.299	nL/L	-7	30	u
1,2-Dichloroethane	0.6592	0.6061	10.00	9.197	nL/L	-8	30	u
1,1,1-Trichloroethane	0.8700	0.7951	10.00	9.142	nL/L	-9	30	u
Benzene	0.4460	0.4052	10.00	9.089	nL/L	-9	30	u
Carbon Tetrachloride	1.0378	0.8146	10.00	7.852	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1147	10.00	8.072	nL/L	-19	30	!v- u
Trichloroethene	0.5119	0.4673	10.00	9.130	nL/L	-9	30	u
Toluene	1.5952	1.5546	10.00	9.748	nL/L	-3	30	u
Tetrachloroethene	0.5206	0.5221	10.00	10.03	nL/L	0	30	u
Ethylbenzene	1.9165	1.9076	10.00	9.957	nL/L	0	30	u
m,p-Xylenes	1.7645	1.7838	20.00	20.22	nL/L	1	30	u
o-Xylene	1.6441	1.6928	10.00	10.30	nL/L	3	30	u
1,3,5-Trimethylbenzene	2.1384	2.1370	10.00	9.996	nL/L	0	30	u
1,2,4-Trimethylbenzene	2.0458	2.0586	10.00	10.07	nL/L	1	30	u
1,4-Dichlorobenzene	1.3357	1.2725	10.00	9.529	nL/L	-5	30	u
Bromofluorobenzene	0.7384	0.7401	10.00	10.02	nL/L	0	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	943956	-18.59	27.15	27.20	0.05
1,4-Difluorobenzene	4209375	3311896	-21.32	31.87	31.93	0.06
Chlorobenzene-d5	3611816	2756429	-23.68	41.74	41.79	0.05

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209380829

Date : 09/21/09 Reference : 244_010
Sequence : MSAIR01 264 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC512900	932738	27.18	3345595	31.91	2871756	41.76
003	BSD	QC512901	933764	27.20	3328820	31.93	2822277	41.79
004	BLANK	QC512899	1005452	27.21	3464203	31.93	2905878	41.79
005	SAMPLE	214808-003	881208	27.21	3310551	31.94	2345224	41.80
006	SAMPLE	214808-004	910538	27.21	3367610	31.94	2175685	41.81
007	SAMPLE	214807-001	904253	27.22	3247637	31.94	2800303	41.79
008	SAMPLE	214807-002	926038	27.20	3277097	31.93	2738137	41.79
009	SAMPLE	214807-003	912602	27.20	3246454	31.92	2796645	41.78
010	SAMPLE	214807-004	879290	27.21	3170978	31.93	2755917	41.78
011	SAMPLE	214807-005	911177	27.17	3217346	31.90	2669065	41.75
012	SAMPLE	214807-006	885006	27.17	3174965	31.90	2714695	41.76
013	SAMPLE	214899-001	876278	27.17	3164293	31.90	2676891	41.76
014	SAMPLE	214899-002	887743	27.18	3169942	31.90	2639001	41.76
015	SAMPLE	214899-003	874618	27.17	3156037	31.90	1828943 *	41.76
016	SAMPLE	214899-004	888691	27.18	3184165	31.90	2651684	41.76
017	SAMPLE	214899-005	841905	27.21	3092999	31.94	2647404	41.79
018	SAMPLE	214899-006	909449	27.20	3282816	31.93	2734653	41.79
019	SAMPLE	214807-001	964887	27.21	3343554	31.93	2748075	41.77
020	SAMPLE	214807-002	949610	27.19	3384872	31.91	2797016	41.76

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209382479

Date : 09/22/09 Reference : 244_010
Sequence : MSAIR01 265 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC513103	943956	27.20	3311896	31.93	2756429	41.79
003	BSD	QC513104	924167	27.21	3295521	31.94	2855772	41.79
004	BLANK	QC513102	1003723	27.22	3444296	31.95	2924866	41.80
005	SAMPLE	214891-001	940919	27.21	3330703	31.93	2606753	41.79
006	SAMPLE	214891-002	920147	27.21	3267245	31.93	2633514	41.79
007	SAMPLE	214891-003	903193	27.20	3286715	31.93	2540701	41.79
008	SAMPLE	214891-004	921055	27.20	3293360	31.93	2644912	41.79
009	SAMPLE	214807-003	905651	27.20	3263847	31.93	2660513	41.79
010	SAMPLE	214807-004	874028	27.21	3159009	31.94	2610001	41.79
011	SAMPLE	214807-005	904227	27.20	3246812	31.93	2662399	41.79
012	SAMPLE	214807-006	892185	27.19	3237166	31.93	2643657	41.79
013	SAMPLE	214891-005	916097	27.19	3266891	31.93	2659147	41.79
014	SAMPLE	214891-006	889892	27.20	3194412	31.93	2551530	41.79
015	SAMPLE	214899-003	897082	27.21	3137863	31.94	2329426	41.80
016	SAMPLE	214899-004	926920	27.21	3321995	31.93	2591247	41.77
017	SAMPLE	214899-005	908553	27.17	3297768	31.90	2586341	41.76
018	SAMPLE	214899-007	889618	27.18	3250357	31.91	2550104	41.77
019	SAMPLE	214899-007	839014	27.18	3017228	31.91	2363625	41.77
020	SAMPLE	214891-001	896858	27.19	3186145	31.91	2515265	41.77

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209380829

Instrument : MSAIR01 Begun : 09/21/09 11:09
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264_001	TUN	BFB			09/21/09 11:09	1.0	1	
002	264_002	CCV/BS	QC512900	Air	155123	09/21/09 12:19	1.0	2 1	
003	264_003	BSD	QC512901	Air	155123	09/21/09 13:19	1.0	2 1	
004	264_004	BLANK	QC512899	Air	155123	09/21/09 14:19	1.0	1	
005	264_005	SAMPLE	214808-003	Air	155123	09/21/09 15:19	80.40	1	4:CYHEXANE=350
006	264_006	SAMPLE	214808-004	Air	155123	09/21/09 16:19	79.60	1	4:CYHEXANE=350
007	264_007	SAMPLE	214807-001	Air	155123	09/21/09 17:19	4.96	1	
008	264_008	SAMPLE	214807-002	Air	155123	09/21/09 18:19	6.06	1	
009	264_009	SAMPLE	214807-003	Air	155123	09/21/09 19:19	36.48	1	
010	264_010	SAMPLE	214807-004	Air	155123	09/21/09 20:20	46.80	1	
011	264_011	SAMPLE	214807-005	Air	155123	09/21/09 21:19	5.28	1	
012	264_012	SAMPLE	214807-006	Air	155123	09/21/09 22:18	12.66	1	
013	264_013	SAMPLE	214899-001	Air	155123	09/21/09 23:20	2.41	1	
014	264_014	SAMPLE	214899-002	Air	155123	09/22/09 00:20	2.38	1	
015	264_015	SAMPLE	214899-003	Air	155123	09/22/09 01:20	16.68	1	1:CDS=140
016	264_016	SAMPLE	214899-004	Air	155123	09/22/09 02:21	7.29	1	
017	264_017	SAMPLE	214899-005	Air	155123	09/22/09 03:21	4.400	1	
018	264_018	SAMPLE	214899-006	Air	155123	09/22/09 04:21	2.28	1	
019	264_019	SAMPLE	214807-001	Air	155123	09/22/09 05:21	2.48	1	
020	264_020	SAMPLE	214807-002	Air	155123	09/22/09 06:21	3.03	1	

SJD 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BO 09/24/09 : Matrix spikes were not performed for this analysis in batch 155123 because they are not required by the method.

Analyst: SJD Date: 09/24/09 Reviewer: BO Date: 09/24/09

Standards used: 1=S12824 2=S12815

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209382479

Instrument : MSAIR01 Begun : 09/22/09 14:39
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	265	TUN	BFB			09/22/09 14:39	1.0	1	
002	265_002	CCV/BS	QC513103	Air	155175	09/22/09 15:40	1.0	2 1	
003	265_003	BSD	QC513104	Air	155175	09/22/09 16:40	1.0	2 1	
004	265_004	BLANK	QC513102	Air	155175	09/22/09 17:41	1.0	1	
005	265_005	SAMPLE	214891-001	Air	155175	09/22/09 18:41	3.03	1	1:PCE=100
006	265_006	SAMPLE	214891-002	Air	155175	09/22/09 19:42	2.08	1	1:PCE=210
007	265_007	SAMPLE	214891-003	Air	155175	09/22/09 20:42	2.16	1	
008	265_008	SAMPLE	214891-004	Air	155175	09/22/09 21:42	2.11	1	
009	265_009	SAMPLE	214807-003	Air	155175	09/22/09 22:42	3.04	1	
010	265_010	SAMPLE	214807-004	Air	155175	09/22/09 23:43	2.34	1	
011	265_011	SAMPLE	214807-005	Air	155175	09/23/09 00:42	2.64	1	
012	265_012	SAMPLE	214807-006	Air	155175	09/23/09 01:43	2.11	1	
013	265_013	SAMPLE	214891-005	Air	155175	09/23/09 02:43	2.04	1	1:TCE=130
014	265_014	SAMPLE	214891-006	Air	155175	09/23/09 03:43	2.04	1	
015	265_015	SAMPLE	214899-003	Air	155175	09/23/09 04:43	166.8	1	
016	265_016	SAMPLE	214899-004	Air	155175	09/23/09 05:43	4.86	1	
017	265_017	SAMPLE	214899-005	Air	155175	09/23/09 06:42	2.200	1	
018	265_018	SAMPLE	214899-007	Air	155175	09/23/09 07:42	13.86	1	
019	265_019	SAMPLE	214899-007	Air	155175	09/23/09 13:13	2.31	1	
020	265_020	SAMPLE	214891-001	Air	155175	09/23/09 14:13	9.09	1	

SJD 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BO 09/24/09 : Matrix spikes were not performed for this analysis in batch 155175 because they are not required by the method.

Analyst: SJD Date: 09/24/09 Reviewer: BO Date: 09/24/09

Standards used: 1=S12824 2=S12815

Page 1 of 1

PROJECT _____

Continued From Page _____

prep date	sample ID	CAN ID	initial pressure (psig)	final pressure (psig)	dilution factor	comments
App 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.13	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
App 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
Sto 9/16/09	BLANK	C1705	~~1x~~ 50	~~1~~ 50	1.0x	
App 9/18/09	214752-010	C00170	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00154	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00060	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00184	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank	C1703	—	—	1.0x	
App 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

PROJECT

Notebook No.

Continued From Page

Prepared by Date	SAMPLE ID	PANID	Initial (psi) pressure	Final (psi) pressure	Dilution factor	Comments
9/21 AM	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	16.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.82	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00031	1.5 added	30.00	40.2x	20x of 2.01x C00022
	004	C00031	1	30.00	39.8x	20x of C00063 109 1.99x
9/22/09 AM	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	23.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1703	—	—	1x	
9/23/09 AM	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed Date Signed Date

PROJECT

Notebook No.

Continued From Page

Performed by / Date	SAMPLE ID	BAN ID	Initial (psi) pressure	Final (psi) pressure	Dilution factor	Comments
9/21 AM	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.52	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00042
	004	C00031	1	30.00	39.8x	20x of C00109 2.99x 1.99x
9/22 AM	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1702	—	—	1x	
9/23 AM	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed | Date | Signed | Date

PROJECT _____

Continued From Page _____

Prepared by / Date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
APP 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.43	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
APP 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
STO 9/16/09	BLANK	C1205	1x 5.3	1x 5.0	1.0x	
APP 9/18/09	214752-010	C00070	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00184	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00160	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00184	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank	C1708	—	—	1.0x	
APP 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214891
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
SMW-5-U-9Q3	214891-001
SMW-5-M-9Q3	214891-002
SMW-6-U-9Q3	214891-003
SMW-6-M-9Q3	214891-004
SMW-6-L-9Q3	214891-005
P-28-U-9Q3	214891-006
P-28-M-9Q3	214891-007
P-28-L-9Q3	214891-008
SMW-7-U-9Q3	214891-009
SMW-7-M-9Q3	214891-010
SMW-7-L-9Q3	214891-011

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/05/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214891**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/15/09**
Samples Received:	**09/15/09**

This data package contains sample and QC results for eleven air samples, requested for the above referenced project on 09/15/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
No analytical problems were encountered.

Chain of Custody

21489

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.

Privileged & Confidential		Site Name:	Sky Harbor AZ
EDD To:	Jennifer Peterson, jennifer.peterson@ch2m.com	Location of Site:	Phoenix, AZ
Sampling Co.:	CH2MHILL	Phase:	
Sampling Program	BSVE QTR SVM		
Sampler:	Dail Contreras Lopez		
PO #	5101516		
Analysis Turnaround Time (TAT):	10		
Consultant			
Full Report TAT:	10		

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To	Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL
Hard Copy To	Jennifer Peterson, CH2M HILL
Invoice To:	Honeywell/Copy to J. Peterson

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
1	SMW-5-U	5	9	SMW-5-U-9Q3	091109	1213	AIR	AIR	REG	1	G	N	X				52
2	SMW-5-M	20	25	SMW-5-M-9Q3	091109	1234	AIR	AIR	REG	1	G	N	X				82
3	SMW-6-U	5	9	SMW-6-U-9Q3	091109	1303	AIR	AIR	REG	1	G	N	X				58
4	SMW-6-M	20	25	SMW-6-M-9Q3	091109	1321	AIR	AIR	REG	1	G	N	X				120
5	SMW-6-L	55	67.26	SMW-6-L-9Q3	091109	1345	AIR	AIR	REG	1	G	N	X				76
6	P-28-U	6	11	P-28-U-9Q3	091109	1425	AIR	AIR	REG	1	G	N	X				99
7	P-28-M	43	48	P-28-M-9Q3	091109	1449	AIR	AIR	REG	1	G	N	X				59
8	P-28-L	58	65.59	P-28-L-9Q3	091109	1505	AIR	AIR	REG	1	G	N	X				73
9	SMW-7-U	5	9	SMW-7-U-9Q3	091109	1602	AIR	AIR	REG	1	G	N	X				88
10	SMW-7-M	20	25	SMW-7-M-9Q3	091109	1618	AIR	AIR	REG	1	G	N	X				101
11	SMW-7-L	55	67.54	SMW-7-L-9Q3	091109	1636	AIR	AIR	REG	1	G	N	X				159
12													Do Not Analyze — Low Vac.				1580148

Relinquished by	Company	CH2MHILL	Received by	FedEx	Company	Condition	Custody Seals Intact
	Date/Time	091109 / 1648			Date/Time	Cooler Temp.	
Relinquished by	Company		Received by		Company	Condition	Custody Seals Intact
	Date/Time				Date/Time 9-15-09 0930	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214891 Date Received 9 Number of coolers 1 box
Client CH2MHill Project Homeyndl Sty Harbor

Date Opened 9/15/09 By (print) J. Goyette (sign)
Date Logged in By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info fed Ex 7994 2889 0465

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None Temp(°C) N/A

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 214891

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-5-U-9Q3	Units (M):	ug/m3
Lab ID:	214891-001	Batch#:	155175
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed	ADEQ Flags
Freon 12	ND	1.5	ND	7.5	3.030	09/22/09	D2
Vinyl Chloride	ND	1.5	ND	3.9	3.030	09/22/09	D2
Chloroethane	ND	1.5	ND	4.0	3.030	09/22/09	D2
Trichlorofluoromethane	ND	1.5	ND	8.5	3.030	09/22/09	D2
1,1-Dichloroethene	ND	1.5	ND	6.0	3.030	09/22/09	D2
Methylene Chloride	ND	1.5	ND	5.3	3.030	09/22/09	D2
Freon 113	ND	1.5	ND	12	3.030	09/22/09	D2
trans-1,2-Dichloroethene	ND	1.5	ND	6.0	3.030	09/22/09	D2
1,1-Dichloroethane	ND	1.5	ND	6.1	3.030	09/22/09	D2
MTBE	ND	1.5	ND	5.5	3.030	09/22/09	D2
cis-1,2-Dichloroethene	ND	1.5	ND	6.0	3.030	09/22/09	D2
n-Hexane	4.4	1.5	16	5.3	3.030	09/22/09	D2
Chloroform	ND	1.5	ND	7.4	3.030	09/22/09	D2
1,2-Dichloroethane	ND	1.5	ND	6.1	3.030	09/22/09	D2
1,1,1-Trichloroethane	ND	1.5	ND	8.3	3.030	09/22/09	D2
Benzene	1.8	1.5	5.8	4.8	3.030	09/22/09	D2
Carbon Tetrachloride	ND	1.5	ND	9.5	3.030	09/22/09	D2
1,4-Dioxane	ND	1.5	ND	5.5	3.030	09/22/09	D2
Trichloroethene	3.0	1.5	16	8.1	3.030	09/22/09	D2
Toluene	ND	1.5	ND	5.7	3.030	09/22/09	D2
Tetrachloroethene	410	4.5	2,800	31	9.090	09/23/09	D1
Ethylbenzene	6.4	1.5	28	6.6	3.030	09/22/09	D2
m,p-Xylenes	4.0	1.5	17	6.6	3.030	09/22/09	D2
o-Xylene	ND	1.5	ND	6.6	3.030	09/22/09	D2
1,3,5-Trimethylbenzene	3.4	1.5	17	7.4	3.030	09/22/09	D2
1,2,4-Trimethylbenzene	19	1.5	91	7.4	3.030	09/22/09	D2
1,4-Dichlorobenzene	ND	1.5	ND	9.1	3.030	09/22/09	D2
Xylene (total)	4.0	3.0	17	13	3.030	09/22/09	D2

Surrogate	%REC	Limits	Diln Fac	Analyzed	ADEQ Flags
Bromofluorobenzene	104	70-130	3.030	09/22/09	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-5-M-9Q3	Units (M):	ug/m3
Lab ID:	214891-002	Sampled:	09/11/09
Matrix:	Air	Received:	09/15/09
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	2.080	155175	09/22/09	D2
Vinyl Chloride	ND	1.0	ND	2.7	2.080	155175	09/22/09	D2
Chloroethane	ND	1.0	ND	2.7	2.080	155175	09/22/09	D2
Trichlorofluoromethane	ND	1.0	ND	5.8	2.080	155175	09/22/09	D2
1,1-Dichloroethene	ND	1.0	ND	4.1	2.080	155175	09/22/09	D2
Methylene Chloride	ND	1.0	ND	3.6	2.080	155175	09/22/09	D2
Freon 113	ND	1.0	ND	8.0	2.080	155175	09/22/09	D2
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	2.080	155175	09/22/09	D2
1,1-Dichloroethane	ND	1.0	ND	4.2	2.080	155175	09/22/09	D2
MTBE	ND	1.0	ND	3.7	2.080	155175	09/22/09	D2
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	2.080	155175	09/22/09	D2
n-Hexane	2.6	1.0	9.0	3.7	2.080	155175	09/22/09	D2
Chloroform	ND	1.0	ND	5.1	2.080	155175	09/22/09	D2
1,2-Dichloroethane	ND	1.0	ND	4.2	2.080	155175	09/22/09	D2
1,1,1-Trichloroethane	ND	1.0	ND	5.7	2.080	155175	09/22/09	D2
Benzene	7.1	1.0	23	3.3	2.080	155175	09/22/09	D2
Carbon Tetrachloride	ND	1.0	ND	6.5	2.080	155175	09/22/09	D2
1,4-Dioxane	ND	1.0	ND	3.7	2.080	155175	09/22/09	D2
Trichloroethene	25	1.0	130	5.6	2.080	155175	09/22/09	D2
Toluene	ND	1.0	ND	3.9	2.080	155175	09/22/09	D2
Tetrachloroethene	700	6.2	4,700	42	12.48	155229	09/24/09	D2
Ethylbenzene	4.2	1.0	18	4.5	2.080	155175	09/22/09	D2
m,p-Xylenes	2.6	1.0	11	4.5	2.080	155175	09/22/09	D2
o-Xylene	ND	1.0	ND	4.5	2.080	155175	09/22/09	D2
1,3,5-Trimethylbenzene	2.3	1.0	11	5.1	2.080	155175	09/22/09	D2
1,2,4-Trimethylbenzene	12	1.0	60	5.1	2.080	155175	09/22/09	D2
1,4-Dichlorobenzene	ND	1.0	ND	6.3	2.080	155175	09/22/09	D2
Xylene (total)	2.6	2.1	11	9.0	2.080	155175	09/22/09	D2

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Bromofluorobenzene	102	70-130	2.080	155175	09/22/09	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-6-U-9Q3	Diln Fac:	2.160
Lab ID:	214891-003	Batch#:	155175
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.3	D1
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	1.4	1.1	7.7	6.1	D1
1,1-Dichloroethene	1.2	1.1	4.6	4.3	D1
Methylene Chloride	ND	1.1	ND	3.8	D1
Freon 113	ND	1.1	ND	8.3	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	2.2	1.1	11	5.3	D1
1,2-Dichloroethane	ND	1.1	ND	4.4	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.9	D1
Benzene	2.8	1.1	8.9	3.5	D1
Carbon Tetrachloride	ND	1.1	ND	6.8	D1
1,4-Dioxane	ND	1.1	ND	3.9	D1
Trichloroethene	49	1.1	260	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	26	1.1	170	7.3	D1
Ethylbenzene	3.1	1.1	13	4.7	D1
m,p-Xylenes	1.9	1.1	8.3	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	1.7	1.1	8.5	5.3	D1
1,2,4-Trimethylbenzene	10	1.1	51	5.3	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.5	D1
Xylene (total)	1.9	1.1	8.3	4.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	106	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-6-M-9Q3	Diln Fac:	2.110
Lab ID:	214891-004	Batch#:	155175
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.2	D1
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	2.3	1.1	13	5.9	D1
1,1-Dichloroethene	3.1	1.1	12	4.2	D1
Methylene Chloride	ND	1.1	ND	3.7	D1
Freon 113	2.1	1.1	16	8.1	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.7	D1
Chloroform	5.4	1.1	27	5.2	D1
1,2-Dichloroethane	ND	1.1	ND	4.3	D1
1,1,1-Trichloroethane	1.4	1.1	7.7	5.8	D1
Benzene	34	1.1	110	3.4	D1
Carbon Tetrachloride	ND	1.1	ND	6.6	D1
1,4-Dioxane	ND	1.1	ND	3.8	D1
Trichloroethene	73	1.1	390	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	32	1.1	210	7.2	D1
Ethylbenzene	2.4	1.1	10	4.6	D1
m,p-Xylenes	1.4	1.1	6.0	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	1.1	1.1	5.6	5.2	D1
1,2,4-Trimethylbenzene	6.7	1.1	33	5.2	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.3	D1
Xylene (total)	1.4	1.1	6.0	4.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-6-L-9Q3	Diln Fac:	6.120
Lab ID:	214891-005	Batch#:	155229
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	3.1	ND	15	D2
Vinyl Chloride	ND	3.1	ND	7.8	D2
Chloroethane	ND	3.1	ND	8.1	D2
Trichlorofluoromethane	8.7	3.1	49	17	D2
1,1-Dichloroethene	24	3.1	95	12	D2
Methylene Chloride	ND	3.1	ND	11	D2
Freon 113	13	3.1	98	23	D2
trans-1,2-Dichloroethene	ND	3.1	ND	12	D2
1,1-Dichloroethane	18	3.1	73	12	D2
MTBE	ND	3.1	ND	11	D2
cis-1,2-Dichloroethene	57	3.1	220	12	D2
n-Hexane	ND	3.1	ND	11	D2
Chloroform	23	3.1	110	15	D2
1,2-Dichloroethane	ND	3.1	ND	12	D2
1,1,1-Trichloroethane	ND	3.1	ND	17	D2
Benzene	ND	3.1	ND	9.8	D2
Carbon Tetrachloride	ND	3.1	ND	19	D2
1,4-Dioxane	ND	3.1	ND	11	D2
Trichloroethene	320	3.1	1,700	16	D2
Toluene	ND	3.1	ND	12	D2
Tetrachloroethene	48	3.1	330	21	D2
Ethylbenzene	ND	3.1	ND	13	D2
m,p-Xylenes	ND	3.1	ND	13	D2
o-Xylene	ND	3.1	ND	13	D2
1,3,5-Trimethylbenzene	ND	3.1	ND	15	D2
1,2,4-Trimethylbenzene	7.4	3.1	36	15	D2
1,4-Dichlorobenzene	ND	3.1	ND	18	D2
Xylene (total)	ND	6.1	ND	27	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-28-U-9Q3	Diln Fac:	2.040
Lab ID:	214891-006	Batch#:	155175
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.0	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
Methylene Chloride	ND	1.0	ND	3.5	D1
Freon 113	ND	1.0	ND	7.8	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.1	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	ND	1.0	ND	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.4	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	16	1.0	110	6.9	D1
Ethylbenzene	2.7	1.0	12	4.4	D1
m,p-Xylenes	1.7	1.0	7.5	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	1.6	1.0	7.7	5.0	D1
1,2,4-Trimethylbenzene	9.3	1.0	46	5.0	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.1	D1
Xylene (total)	1.7	1.0	7.5	4.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-28-M-9Q3	Diln Fac:	2.580
Lab ID:	214891-007	Batch#:	155229
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.4	1.3	7.1	6.4	D1
Vinyl Chloride	ND	1.3	ND	3.3	D1
Chloroethane	ND	1.3	ND	3.4	D1
Trichlorofluoromethane	3.9	1.3	22	7.2	D1
1,1-Dichloroethene	15	1.3	58	5.1	D1
Methylene Chloride	ND	1.3	ND	4.5	D1
Freon 113	1.9	1.3	14	9.9	D1
trans-1,2-Dichloroethene	ND	1.3	ND	5.1	D1
1,1-Dichloroethane	ND	1.3	ND	5.2	D1
MTBE	ND	1.3	ND	4.7	D1
cis-1,2-Dichloroethene	ND	1.3	ND	5.1	D1
n-Hexane	ND	1.3	ND	4.5	D1
Chloroform	7.5	1.3	37	6.3	D1
1,2-Dichloroethane	ND	1.3	ND	5.2	D1
1,1,1-Trichloroethane	2.7	1.3	15	7.0	D1
Benzene	ND	1.3	ND	4.1	D1
Carbon Tetrachloride	ND	1.3	ND	8.1	D1
1,4-Dioxane	ND	1.3	ND	4.6	D1
Trichloroethene	3.7	1.3	20	6.9	D1
Toluene	ND	1.3	ND	4.9	D1
Tetrachloroethene	45	1.3	300	8.7	D1
Ethylbenzene	1.3	1.3	5.7	5.6	D1
m,p-Xylenes	ND	1.3	ND	5.6	D1
o-Xylene	ND	1.3	ND	5.6	D1
1,3,5-Trimethylbenzene	ND	1.3	ND	6.3	D1
1,2,4-Trimethylbenzene	3.9	1.3	19	6.3	D1
1,4-Dichlorobenzene	ND	1.3	ND	7.8	D1
Xylene (total)	ND	2.6	ND	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-28-L-9Q3	Diln Fac:	2.240
Lab ID:	214891-008	Batch#:	155229
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.6	1.1	7.7	5.5	D1
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
Trichlorofluoromethane	2.4	1.1	14	6.3	D1
1,1-Dichloroethene	9.1	1.1	36	4.4	D1
Methylene Chloride	ND	1.1	ND	3.9	D1
Freon 113	2.1	1.1	16	8.6	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	3.1	1.1	15	5.5	D1
1,2-Dichloroethane	ND	1.1	ND	4.5	D1
1,1,1-Trichloroethane	ND	1.1	ND	6.1	D1
Benzene	ND	1.1	ND	3.6	D1
Carbon Tetrachloride	ND	1.1	ND	7.0	D1
1,4-Dioxane	ND	1.1	ND	4.0	D1
Trichloroethene	1.5	1.1	8.2	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	29	1.1	190	7.6	D1
Ethylbenzene	1.3	1.1	5.5	4.9	D1
m,p-Xylenes	ND	1.1	ND	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,2,4-Trimethylbenzene	3.6	1.1	18	5.5	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.7	D1
Xylene (total)	ND	2.2	ND	9.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-7-U-9Q3	Diln Fac:	2.340
Lab ID:	214891-009	Batch#:	155229
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.2	ND	5.8	D1
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.1	D1
Trichlorofluoromethane	ND	1.2	ND	6.6	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
Methylene Chloride	ND	1.2	ND	4.1	D1
Freon 113	ND	1.2	ND	9.0	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	ND	1.2	ND	4.1	D1
Chloroform	ND	1.2	ND	5.7	D1
1,2-Dichloroethane	ND	1.2	ND	4.7	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.4	D1
Benzene	3.3	1.2	11	3.7	D1
Carbon Tetrachloride	ND	1.2	ND	7.4	D1
1,4-Dioxane	ND	1.2	ND	4.2	D1
Trichloroethene	3.2	1.2	17	6.3	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	1.9	1.2	13	7.9	D1
Ethylbenzene	2.6	1.2	11	5.1	D1
m,p-Xylenes	1.6	1.2	7.1	5.1	D1
o-Xylene	ND	1.2	ND	5.1	D1
1,3,5-Trimethylbenzene	1.5	1.2	7.4	5.8	D1
1,2,4-Trimethylbenzene	8.8	1.2	43	5.8	D1
1,4-Dichlorobenzene	ND	1.2	ND	7.0	D1
Xylene (total)	1.6	1.2	7.1	5.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-7-M-9Q3	Diln Fac:	2.250
Lab ID:	214891-010	Batch#:	155229
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.6	D1
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
Trichlorofluoromethane	ND	1.1	ND	6.3	D1
1,1-Dichloroethene	2.3	1.1	8.9	4.5	D1
Methylene Chloride	ND	1.1	ND	3.9	D1
Freon 113	ND	1.1	ND	8.6	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	7.6	1.1	31	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	ND	1.1	ND	5.5	D1
1,2-Dichloroethane	ND	1.1	ND	4.6	D1
1,1,1-Trichloroethane	2.6	1.1	14	6.1	D1
Benzene	1.3	1.1	4.2	3.6	D1
Carbon Tetrachloride	ND	1.1	ND	7.1	D1
1,4-Dioxane	ND	1.1	ND	4.1	D1
Trichloroethene	14	1.1	75	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	3.7	1.1	25	7.6	D1
Ethylbenzene	1.9	1.1	8.1	4.9	D1
m,p-Xylenes	1.2	1.1	5.2	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,2,4-Trimethylbenzene	6.0	1.1	30	5.5	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.8	D1
Xylene (total)	1.2	1.1	5.2	4.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-7-L-9Q3	Diln Fac:	12.72
Lab ID:	214891-011	Batch#:	155229
Matrix:	Air	Sampled:	09/11/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	6.4	ND	31	D1
Vinyl Chloride	ND	6.4	ND	16	D1
Chloroethane	ND	6.4	ND	17	D1
Trichlorofluoromethane	ND	6.4	ND	36	D1
1,1-Dichloroethene	250	6.4	980	25	D1
Methylene Chloride	ND	6.4	ND	22	D1
Freon 113	ND	6.4	ND	49	D1
trans-1,2-Dichloroethene	ND	6.4	ND	25	D1
1,1-Dichloroethane	370	6.4	1,500	26	D1
MTBE	ND	6.4	ND	23	D1
cis-1,2-Dichloroethene	70	6.4	280	25	D1
n-Hexane	ND	6.4	ND	22	D1
Chloroform	15	6.4	72	31	D1
1,2-Dichloroethane	8.4	6.4	34	26	D1
1,1,1-Trichloroethane	240	6.4	1,300	35	D1
Benzene	ND	6.4	ND	20	D1
Carbon Tetrachloride	ND	6.4	ND	40	D1
1,4-Dioxane	ND	6.4	ND	23	D1
Trichloroethene	630	6.4	3,400	34	D1
Toluene	ND	6.4	ND	24	D1
Tetrachloroethene	21	6.4	140	43	D1
Ethylbenzene	ND	6.4	ND	28	D1
m,p-Xylenes	ND	6.4	ND	28	D1
o-Xylene	ND	6.4	ND	28	D1
1,3,5-Trimethylbenzene	ND	6.4	ND	31	D1
1,2,4-Trimethylbenzene	6.7	6.4	33	31	D1
1,4-Dichlorobenzene	ND	6.4	ND	38	D1
Xylene (total)	ND	13	ND	55	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513102	Diln Fac:	1.000
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513103

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.154	92	70-130	
Vinyl Chloride	10.00	7.688	77	70-130	
Chloroethane	10.00	9.296	93	70-130	
Trichlorofluoromethane	10.00	8.596	86	70-130	
1,1-Dichloroethene	10.00	9.146	91	70-130	
Methylene Chloride	10.00	9.274	93	70-130	
Freon 113	10.00	9.295	93	70-130	
trans-1,2-Dichloroethene	10.00	9.991	100	70-130	
1,1-Dichloroethane	10.00	9.414	94	70-130	
MTBE	10.00	9.600	96	70-130	
cis-1,2-Dichloroethene	10.00	8.890	89	70-130	
n-Hexane	10.00	9.140	91	70-130	
Chloroform	10.00	9.299	93	70-130	
1,2-Dichloroethane	10.00	9.197	92	70-130	
1,1,1-Trichloroethane	10.00	9.142	91	70-130	
Benzene	10.00	9.089	91	70-130	
Carbon Tetrachloride	10.00	7.852	79	70-130	
1,4-Dioxane	10.00	8.072	81	70-130	
Trichloroethene	10.00	9.130	91	70-130	
Toluene	10.00	9.748	97	70-130	
Tetrachloroethene	10.00	10.03	100	70-130	
Ethylbenzene	10.00	9.957	100	70-130	
m,p-Xylenes	20.00	20.22	101	70-130	
o-Xylene	10.00	10.30	103	70-130	
1,3,5-Trimethylbenzene	10.00	9.996	100	70-130	
1,2,4-Trimethylbenzene	10.00	10.07	101	70-130	
1,4-Dichlorobenzene	10.00	9.529	95	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513104

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.986	90	70-130	2	25	
Vinyl Chloride	10.00	8.741	87	70-130	13	25	
Chloroethane	10.00	9.328	93	70-130	0	25	
Trichlorofluoromethane	10.00	8.740	87	70-130	2	25	
1,1-Dichloroethene	10.00	9.227	92	70-130	1	25	
Methylene Chloride	10.00	9.343	93	70-130	1	25	
Freon 113	10.00	9.317	93	70-130	0	25	
trans-1,2-Dichloroethene	10.00	10.06	101	70-130	1	25	
1,1-Dichloroethane	10.00	9.379	94	70-130	0	25	
MTBE	10.00	9.603	96	70-130	0	25	
cis-1,2-Dichloroethene	10.00	8.817	88	70-130	1	25	
n-Hexane	10.00	9.296	93	70-130	2	25	
Chloroform	10.00	9.237	92	70-130	1	25	
1,2-Dichloroethane	10.00	9.135	91	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.049	90	70-130	1	25	
Benzene	10.00	9.285	93	70-130	2	25	
Carbon Tetrachloride	10.00	7.833	78	70-130	0	25	
1,4-Dioxane	10.00	8.392	84	70-130	4	25	
Trichloroethene	10.00	9.385	94	70-130	3	25	
Toluene	10.00	9.140	91	70-130	6	25	
Tetrachloroethene	10.00	9.632	96	70-130	4	25	
Ethylbenzene	10.00	9.797	98	70-130	2	25	
m,p-Xylenes	20.00	19.44	97	70-130	4	25	
o-Xylene	10.00	9.616	96	70-130	7	25	
1,3,5-Trimethylbenzene	10.00	9.542	95	70-130	5	25	
1,2,4-Trimethylbenzene	10.00	9.571	96	70-130	5	25	
1,4-Dichlorobenzene	10.00	9.238	92	70-130	3	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513336	Diln Fac:	1.000
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513337

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.661	97	70-130	
Vinyl Chloride	10.00	8.186	82	70-130	
Chloroethane	10.00	9.670	97	70-130	
Trichlorofluoromethane	10.00	9.220	92	70-130	
1,1-Dichloroethene	10.00	9.900	99	70-130	
Methylene Chloride	10.00	9.790	98	70-130	
Freon 113	10.00	10.31	103	70-130	
trans-1,2-Dichloroethene	10.00	10.76	108	70-130	
1,1-Dichloroethane	10.00	10.07	101	70-130	
MTBE	10.00	10.37	104	70-130	
cis-1,2-Dichloroethene	10.00	9.453	95	70-130	
n-Hexane	10.00	9.780	98	70-130	
Chloroform	10.00	9.975	100	70-130	
1,2-Dichloroethane	10.00	9.448	94	70-130	
1,1,1-Trichloroethane	10.00	9.452	95	70-130	
Benzene	10.00	9.705	97	70-130	
Carbon Tetrachloride	10.00	7.869	79	70-130	
1,4-Dioxane	10.00	8.195	82	70-130	
Trichloroethene	10.00	9.235	92	70-130	
Toluene	10.00	10.03	100	70-130	
Tetrachloroethene	10.00	10.55	106	70-130	
Ethylbenzene	10.00	10.69	107	70-130	
m,p-Xylenes	20.00	21.12	106	70-130	
o-Xylene	10.00	10.83	108	70-130	
1,3,5-Trimethylbenzene	10.00	10.53	105	70-130	
1,2,4-Trimethylbenzene	10.00	10.54	105	70-130	
1,4-Dichlorobenzene	10.00	9.989	100	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513338

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.666	97	70-130	0	25	
Vinyl Chloride	10.00	9.130	91	70-130	11	25	
Chloroethane	10.00	9.772	98	70-130	1	25	
Trichlorofluoromethane	10.00	9.194	92	70-130	0	25	
1,1-Dichloroethene	10.00	9.984	100	70-130	1	25	
Methylene Chloride	10.00	9.634	96	70-130	2	25	
Freon 113	10.00	10.05	101	70-130	3	25	
trans-1,2-Dichloroethene	10.00	10.69	107	70-130	1	25	
1,1-Dichloroethane	10.00	9.947	99	70-130	1	25	
MTBE	10.00	10.28	103	70-130	1	25	
cis-1,2-Dichloroethene	10.00	9.158	92	70-130	3	25	
n-Hexane	10.00	9.717	97	70-130	1	25	
Chloroform	10.00	9.830	98	70-130	1	25	
1,2-Dichloroethane	10.00	9.210	92	70-130	3	25	
1,1,1-Trichloroethane	10.00	9.224	92	70-130	2	25	
Benzene	10.00	9.486	95	70-130	2	25	
Carbon Tetrachloride	10.00	7.679	77	70-130	2	25	
1,4-Dioxane	10.00	8.449	84	70-130	3	25	
Trichloroethene	10.00	9.272	93	70-130	0	25	
Toluene	10.00	9.927	99	70-130	1	25	
Tetrachloroethene	10.00	10.23	102	70-130	3	25	
Ethylbenzene	10.00	10.50	105	70-130	2	25	
m,p-Xylenes	20.00	20.98	105	70-130	1	25	
o-Xylene	10.00	10.59	106	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	10.28	103	70-130	2	25	
1,2,4-Trimethylbenzene	10.00	10.60	106	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.681	97	70-130	3	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214891	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513405	Diln Fac:	1.000
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214891 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214891 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209382479000 File : 265 Time : 22-SEP-2009 14:39

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	56201	10.95	
75	30% - 66% of mass 95	189443	36.93	
95		513040	100.00	
96	5% - 9% of mass 95	27004	5.26	
173	< 2% of mass 174	1181	0.43	
174	50% - 120% of mass 95	276278	53.85	
175	4% - 9% of mass 174	17407	6.30	
176	93% - 101% of mass 174	259608	93.97	
177	5% - 9% of mass 176	14307	5.51	

CURTIS & TOMPKINS BFB TUNE FOR 214891 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209384333002 File : 266_002 Time : 23-SEP-2009 19:34

Standards: S12824 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	61944	11.39	
75	30% - 66% of mass 95	212210	39.01	
95		544034	100.00	
96	5% - 9% of mass 95	30865	5.67	
173	< 2% of mass 174	623	0.21	
174	50% - 120% of mass 95	296983	54.59	
175	4% - 9% of mass 174	20194	6.80	
176	93% - 101% of mass 174	294550	99.18	
177	5% - 9% of mass 176	18794	6.38	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214891 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	26	33.33	5	50.00	-7	100.0	-31
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	24	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	24	5.000	-12	10.00	-56	16.67	31	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	-39	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	-22
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	-25
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	-21
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	-22	1.667	0	5.000	-12	10.00	-8	16.67	23	33.33	30				
Trichloroethene	0.167	25	0.500	1	1.667	26	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	-21	100.0	-40
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	25	0.500	3	1.667	25	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	-28
Ethylbenzene	0.167	22	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	-31
m,p-Xylenes	0.333	26	1.000	8	3.333	22	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	-35
o-Xylene	0.167	31	0.500	5	1.667	25	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	-24	100.0	-33
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	22	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	-27
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	26	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	-30
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214891 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214891 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC513103 IDF : 1.0
Seqnum : 1209382479002.3 File : 265_002 Time : 22-SEP-2009 15:40
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7266	10.00	9.154	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.6225	10.00	7.688	nL/L	-23	30	u
Chloroethane	0.0783	0.0728	10.00	9.296	nL/L	-7	30	u
Trichlorofluoromethane	3.8163	3.2795	10.00	8.596	nL/L	-14	30	u
1,1-Dichloroethene	1.1450	1.0470	10.00	9.146	nL/L	-9	30	u
Methylene Chloride	0.7638	0.7083	10.00	9.274	nL/L	-7	30	u
Freon 113	2.6173	2.4322	10.00	9.295	nL/L	-7	30	u
trans-1,2-Dichloroethene	1.7822	1.7801	10.00	9.991	nL/L	0	30	!v- u
1,1-Dichloroethane	2.2048	2.0750	10.00	9.414	nL/L	-6	30	u
MTBE	1.1668	1.1199	10.00	9.600	nL/L	-4	30	u
cis-1,2-Dichloroethene	2.0400	1.8131	10.00	8.890	nL/L	-11	30	u
n-Hexane	0.8500	0.7767	10.00	9.140	nL/L	-9	30	u
Chloroform	2.3937	2.2253	10.00	9.299	nL/L	-7	30	u
1,2-Dichloroethane	0.6592	0.6061	10.00	9.197	nL/L	-8	30	u
1,1,1-Trichloroethane	0.8700	0.7951	10.00	9.142	nL/L	-9	30	u
Benzene	0.4460	0.4052	10.00	9.089	nL/L	-9	30	u
Carbon Tetrachloride	1.0378	0.8146	10.00	7.852	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1147	10.00	8.072	nL/L	-19	30	!v- u
Trichloroethene	0.5119	0.4673	10.00	9.130	nL/L	-9	30	u
Toluene	1.5952	1.5546	10.00	9.748	nL/L	-3	30	u
Tetrachloroethene	0.5206	0.5221	10.00	10.03	nL/L	0	30	u
Ethylbenzene	1.9165	1.9076	10.00	9.957	nL/L	0	30	u
m,p-Xylenes	1.7645	1.7838	20.00	20.22	nL/L	1	30	u
o-Xylene	1.6441	1.6928	10.00	10.30	nL/L	3	30	u
1,3,5-Trimethylbenzene	2.1384	2.1370	10.00	9.996	nL/L	0	30	u
1,2,4-Trimethylbenzene	2.0458	2.0586	10.00	10.07	nL/L	1	30	u
1,4-Dichlorobenzene	1.3357	1.2725	10.00	9.529	nL/L	-5	30	u
Bromofluorobenzene	0.7384	0.7401	10.00	10.02	nL/L	0	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	943956	-18.59	27.15	27.20	0.05
1,4-Difluorobenzene	4209375	3311896	-21.32	31.87	31.93	0.06
Chlorobenzene-d5	3611816	2756429	-23.68	41.74	41.79	0.05

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214891 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC513337 IDF : 1.0
Seqnum : 1209384333003.1 File : 266_003 Time : 23-SEP-2009 20:34
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.8780	10.00	9.661	nL/L	-3	30	u
Vinyl Chloride	0.8099	0.6628	10.00	8.186	nL/L	-18	30	u
Chloroethane	0.0783	0.0757	10.00	9.670	nL/L	-3	30	u
Trichlorofluoromethane	3.8163	3.5173	10.00	9.220	nL/L	-8	30	u
1,1-Dichloroethene	1.1450	1.1332	10.00	9.900	nL/L	-1	30	u
Methylene Chloride	0.7638	0.7477	10.00	9.790	nL/L	-2	30	u
Freon 113	2.6173	2.6982	10.00	10.31	nL/L	3	30	u
trans-1,2-Dichloroethene	1.7822	1.9179	10.00	10.76	nL/L	8	30	!v- u
1,1-Dichloroethane	2.2048	2.2188	10.00	10.07	nL/L	1	30	u
MTBE	1.1668	1.2093	10.00	10.37	nL/L	4	30	u
cis-1,2-Dichloroethene	2.0400	1.9273	10.00	9.453	nL/L	-5	30	u
n-Hexane	0.8500	0.8311	10.00	9.780	nL/L	-2	30	u
Chloroform	2.3937	2.3868	10.00	9.975	nL/L	0	30	u
1,2-Dichloroethane	0.6592	0.6226	10.00	9.448	nL/L	-6	30	u
1,1,1-Trichloroethane	0.8700	0.8222	10.00	9.452	nL/L	-5	30	u
Benzene	0.4460	0.4326	10.00	9.705	nL/L	-3	30	u
Carbon Tetrachloride	1.0378	0.8164	10.00	7.869	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1164	10.00	8.195	nL/L	-18	30	!v- u
Trichloroethene	0.5119	0.4725	10.00	9.235	nL/L	-8	30	u
Toluene	1.5952	1.5998	10.00	10.03	nL/L	0	30	u
Tetrachloroethene	0.5206	0.5492	10.00	10.55	nL/L	6	30	u
Ethylbenzene	1.9165	2.0483	10.00	10.69	nL/L	7	30	u
m,p-Xylenes	1.7645	1.8639	20.00	21.12	nL/L	6	30	m u
o-Xylene	1.6441	1.7807	10.00	10.83	nL/L	8	30	u
1,3,5-Trimethylbenzene	2.1384	2.2515	10.00	10.53	nL/L	5	30	u
1,2,4-Trimethylbenzene	2.0458	2.1565	10.00	10.54	nL/L	5	30	u
1,4-Dichlorobenzene	1.3357	1.3342	10.00	9.989	nL/L	0	30	u
Bromofluorobenzene	0.7384	0.7289	10.00	9.871	nL/L	-1	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	850929	-26.61	27.15	27.20	0.05
1,4-Difluorobenzene	4209375	3132000	-25.59	31.87	31.93	0.06
Chlorobenzene-d5	3611816	2549000	-29.43	41.74	41.79	0.05

SJD 10/04/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209382479

Date : 09/22/09 Reference : 244_010
Sequence : MSAIR01 265 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC513103	943956	27.20	3311896	31.93	2756429	41.79
003	BSD	QC513104	924167	27.21	3295521	31.94	2855772	41.79
004	BLANK	QC513102	1003723	27.22	3444296	31.95	2924866	41.80
005	SAMPLE	214891-001	940919	27.21	3330703	31.93	2606753	41.79
006	SAMPLE	214891-002	920147	27.21	3267245	31.93	2633514	41.79
007	SAMPLE	214891-003	903193	27.20	3286715	31.93	2540701	41.79
008	SAMPLE	214891-004	921055	27.20	3293360	31.93	2644912	41.79
009	SAMPLE	214807-003	905651	27.20	3263847	31.93	2660513	41.79
010	SAMPLE	214807-004	874028	27.21	3159009	31.94	2610001	41.79
011	SAMPLE	214807-005	904227	27.20	3246812	31.93	2662399	41.79
012	SAMPLE	214807-006	892185	27.19	3237166	31.93	2643657	41.79
013	SAMPLE	214891-005	916097	27.19	3267000	31.93	2659000	41.79
014	SAMPLE	214891-006	889892	27.20	3194412	31.93	2551530	41.79
015	SAMPLE	214899-003	897082	27.21	3138000	31.94	2329000	41.80
016	SAMPLE	214899-004	926920	27.21	3321995	31.93	2591247	41.77
017	SAMPLE	214899-005	908553	27.17	3297768	31.90	2586341	41.76
018	SAMPLE	214899-007	889618	27.18	3250357	31.91	2550104	41.77
019	SAMPLE	214899-007	839014	27.18	3017228	31.91	2363625	41.77
020	SAMPLE	214891-001	896858	27.19	3186145	31.91	2515265	41.77

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209384333

Date : 09/23/09 Reference : 244_010
Sequence : MSAIR01 266 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
003	CCV/BS	QC513337	850929	27.20	3132000	31.93	2549000	41.79
004	BSD	QC513338	840021	27.20	3111000	31.93	2539000	41.79
005	BLANK	QC513336	946099	27.21	3290000	31.94	2695000	41.79
006	BLANK	QC513405	876460	27.21	3104000	31.94	2533000	41.79
007	SAMPLE	214891-002	864462	27.20	3143335	31.93	2471656	41.79
008	SAMPLE	214891-005	829890	27.20	3103636	31.93	2416424	41.79
009	SAMPLE	214891-007	855717	27.20	3026512	31.93	2400204	41.79
010	SAMPLE	214891-008	847271	27.20	3022175	31.93	2439920	41.79
011	SAMPLE	214891-009	829740	27.21	3010455	31.93	2293633	41.79
012	SAMPLE	214891-010	822224	27.21	2955913	31.93	2294897	41.79
013	SAMPLE	214891-011	841951	27.18	2957287	31.91	2341916	41.76
014	SAMPLE	214897-001	845698	27.19	3049501	31.91	2334987	41.77
015	SAMPLE	214897-002	752259	27.20	2690205	31.92	2194700	41.77
016	SAMPLE	214897-003	833872	27.19	2982782	31.91	2350841	41.76
017	SAMPLE	214897-004	844130	27.18	2952000	31.91	2352000	41.77
018	SAMPLE	214897-007	795713	27.20	2957514	31.94	2159400 *	41.80
019	SAMPLE	214897-008	864386	27.20	3132973	31.93	1968673 *	41.80
020	SAMPLE	214897-009	755321	27.23	2805000	31.97	285245 *	41.87
021	SAMPLE	214897-005	552916 *	27.22	2037000 *	31.95	1456000 *	41.82
022	SAMPLE	214897-006	594257 *	27.22	2149925 *	31.94	1726863 *	41.80
023	SAMPLE	214897-002	591573 *	27.21	2186000 *	31.94	1688000 *	41.79
024	SAMPLE	214897-006	682514 *	27.21	2411000 *	31.94	1903000 *	41.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209382479

Instrument : MSAIR01 Begun : 09/22/09 14:39
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	265	TUN	BFB			09/22/09 14:39	1.0	1	
002	265_002	CCV/BS	QC513103	Air	155175	09/22/09 15:40	1.0	2 1	
003	265_003	BSD	QC513104	Air	155175	09/22/09 16:40	1.0	2 1	
004	265_004	BLANK	QC513102	Air	155175	09/22/09 17:41	1.0	1	
005	265_005	SAMPLE	214891-001	Air	155175	09/22/09 18:41	3.03	1	1:PCE=100
006	265_006	SAMPLE	214891-002	Air	155175	09/22/09 19:42	2.08	1	1:PCE=210
007	265_007	SAMPLE	214891-003	Air	155175	09/22/09 20:42	2.16	1	
008	265_008	SAMPLE	214891-004	Air	155175	09/22/09 21:42	2.11	1	
009	265_009	SAMPLE	214807-003	Air	155175	09/22/09 22:42	3.04	1	
010	265_010	SAMPLE	214807-004	Air	155175	09/22/09 23:43	2.34	1	
011	265_011	SAMPLE	214807-005	Air	155175	09/23/09 00:42	2.64	1	
012	265_012	SAMPLE	214807-006	Air	155175	09/23/09 01:43	2.11	1	
013	265_013	SAMPLE	214891-005	Air	155175	09/23/09 02:43	2.04	1	1:TCE=130
014	265_014	SAMPLE	214891-006	Air	155175	09/23/09 03:43	2.04	1	
015	265_015	SAMPLE	214899-003	Air	155175	09/23/09 04:43	166.8	1	
016	265_016	SAMPLE	214899-004	Air	155175	09/23/09 05:43	4.86	1	
017	265_017	SAMPLE	214899-005	Air	155175	09/23/09 06:42	2.200	1	
018	265_018	SAMPLE	214899-007	Air	155175	09/23/09 07:42	13.86	1	
019	265_019	SAMPLE	214899-007	Air	155175	09/23/09 13:13	2.31	1	
020	265_020	SAMPLE	214891-001	Air	155175	09/23/09 14:13	9.09	1	

SJD 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BO 09/24/09 : Matrix spikes were not performed for this analysis in batch 155175 because they are not required by the method.

Analyst: SJD Date: 09/24/09 Reviewer: BO Date: 09/24/09

Standards used: 1=S12824 2=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209384333

Instrument : MSAIR01 Begun : 09/23/09 18:35
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	266_001	X	BFB			09/23/09 18:35	1.0	1	
002	266_002	TUN	BFB	Air		09/23/09 19:34	1.0	1	
003	266_003	CCV/BS	QC513337	Air	155229	09/23/09 20:34	1.0	2 1	
004	266_004	BSD	QC513338	Air	155229	09/23/09 21:33	1.0	2 1	
005	266_005	BLANK	QC513336	Air	155229	09/23/09 22:33	1.0	1	
006	266_006	BLANK	QC513405	Air	155229	09/24/09 00:07	1.0	1	
007	266_007	SAMPLE	214891-002	Air	155229	09/24/09 01:07	12.48	1	
008	266_008	SAMPLE	214891-005	Air	155229	09/24/09 02:08	6.12	1	
009	266_009	SAMPLE	214891-007	Air	155229	09/24/09 03:08	2.58	1	
010	266_010	SAMPLE	214891-008	Air	155229	09/24/09 04:08	2.24	1	
011	266_011	SAMPLE	214891-009	Air	155229	09/24/09 05:08	2.34	1	
012	266_012	SAMPLE	214891-010	Air	155229	09/24/09 06:07	2.25	1	
013	266_013	SAMPLE	214891-011	Air	155229	09/24/09 07:07	12.72	1	
014	266_014	SAMPLE	214897-001	Air	155229	09/24/09 08:08	2.06	1	
015	266_015	SAMPLE	214897-002	Air	155229	09/24/09 09:08	2.26	1	
016	266_016	SAMPLE	214897-003	Air	155229	09/24/09 10:07	2.17	1	
017	266_017	SAMPLE	214897-004	Air	155229	09/24/09 11:07	2.18	1	
018	266_018	SAMPLE	214897-007	Air	155229	09/24/09 12:06	2.12	1	1:DCA11=130
019	266_019	SAMPLE	214897-008	Air	155229	09/24/09 13:06	2.09	1	
020	266_020	SAMPLE	214897-009	Air	155229	09/24/09 14:06	2.11	1	8:CYHEXANE=1200
021	266_021	SAMPLE	214897-005	Air	155229	09/24/09 15:06	42.60	1	1:CYHEXANE=110
022	266_022	SAMPLE	214897-006	Air	155229	09/24/09 16:06	129.6	1	
023	266_023	SAMPLE	214897-002	Air	155229	09/24/09 18:09	2.26	1	
024	266_024	SAMPLE	214897-006	Air	155229	09/24/09 19:09	43.20	1	

SJD 10/04/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 24.

BO 10/05/09 : Matrix spikes were not performed for this analysis in batch 155229 because they are not required by the method.

Analyst: SJD Date: 10/04/09 Reviewer: BO Date: 10/05/09

Standards used: 1=S12824 2=S12815

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PROJECT

Notebook No.

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Performed by / Date	SAMPLE ID	BAN ID	Initial (psi) pressure	Final (psi) pressure	Dilution factor	Comments
9/21 AM	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.52	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00042
	004	C00031	1	30.00	39.8x	20x of C00109 2.99x 1.99x
9/22 AM	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1702	—	—	1x	
9/23 AM	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed | Date | Signed | Date

PROJECT _____

Continued From Page _____

Prepared by / Date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
APP 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.43	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
APP 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
STO 9/16/09	BLANK	C1205	1x 53	1 500	1.0x	
APP 9/18/09	214752-010	C00070	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00184	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00160	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00084	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank	C1708	—	—	1.0x	
APP 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

PROJECT _____ **Notebook No.** _____

Continued From Page _____

Prepared by Date	SAMPLE ID	DAN ID	Initial (psig) pressure	Final (psig) pressure	Dilution factor	Comments
9/21 App	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.82	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00023
	004	C00031	1	30.00	39.8x	20x of C00107 sample 1.99x
9/22/09 App	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1703	—	—	1x	
9/23/09 App	214897-001	C00091	10.79	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed | Date | Signed | Date

PROJECT _____

Continued From Page _____

~~Property~~ Date	Sample ID	CAN ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23 MAP	214897-005	C00014	1.5 added	30.00	42.6x	20x of 2.13 x C00110
↓	→ 006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
S009 9/26/07	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00055	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.13	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1203	—	—	1x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214897
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
P-46-U-9Q3	214897-001
P-46-M-9Q3	214897-002
P-46-L-9Q3	214897-003
P-30-U-9Q3	214897-004
P-30-M-9Q3	214897-005
P-30-L-9Q3	214897-006
P-47-9Q3	214897-007
PL-102A-9Q3	214897-008
PL-2102-9Q3	214897-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/12/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214897**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/15/09**
Samples Received:	**09/15/09**

This data package contains sample and QC results for nine air samples, requested for the above referenced project on 09/15/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
High surrogate recoveries were observed for bromofluorobenzene in P-30-M-9Q3 (lab # 214897-005) and PL-2102-9Q3 (lab # 214897-009), due to matrix interference; these high surrogate recoveries were confirmed by re-analysis.

A number of samples were diluted due to passive grab sampling.

P-30-M-9Q3 (lab # 214897-005), P-30-L-9Q3 (lab # 214897-006), and PL-102A-9Q3 (lab # 214897-008) were diluted due to problematic matrix.

No other analytical problems were encountered.

Chain of Custody

214897

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: Trail Cothmas Lopez
PO #: 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

Text & Excel File Drive: Excel & Text File Order

Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units						
1	P-46-U	6	11	P-46-U-9Q3	091209	0807	AIR	AIR	REG	1	G	N	X				91
2	P-46-M	45	50	P-46-M-9Q3	091209	0835	AIR	AIR	REG	1	G	N	X				68
3	P-46-L	57	68.81	P-46-L-9Q3	091209	0848	AIR	AIR	REG	1	G	N	X				65
4	P-30-U	6	11	P-30-U-9Q3	091209	0934	AIR	AIR	REG	1	G	N	X				79
5	P-30-M	50	55	P-30-M-9Q3	091209	0949	AIR	AIR	REG	1	G	N	X				110
6	P-30-L	60	66.83	P-30-L-9Q3	091209	1017	AIR	AIR	REG	1	G	N	X				172
7	P-47	6	11	P-47-9Q3	091209	1051	AIR	AIR	REG	1	G	N	X				77
8	PL-102A	37	77	PL-102A-9Q3	091309	10:45	AIR	AIR	REG	1	G	N	X				71
9	PL-2102	35	75	PL-2102-9Q3	091309	09:15	AIR	AIR	REG	1	G	N	X				62
10																	
11																	
12																	

Relinquished by	Company: CH2M HILL	Received by: FedEx	Company		Condition		Custody Seals Intact
	Date/Time: 091309		Date/Time		Cooler Temp.		
Relinquished by	Company	Received by	Company: C.T		Condition		Custody Seals Intact
	Date/Time		Date/Time: 9/10/09 0930		Cooler Temp.		

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214897 Date Received 9.15.09 Number of coolers 1 box
Client CH2M Hill Project Hunewell Stylhartor

Date Opened 9/15/09 By (print) J. Gayette (sign)
Date Logged in 9/15/09 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info Fed Ex 7921 6154 4883

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
   ☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None Temp(°C) N/A

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 214897

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-46-U-9Q3	Diln Fac:	2.060
Lab ID:	214897-001	Batch#:	155229
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	1.1	1.0	3.8	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	ND	1.0	ND	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	5.0	1.0	27	5.5	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	ND	1.0	ND	7.0	D1
Ethylbenzene	3.3	1.0	14	4.5	D1
m,p-Xylenes	2.0	1.0	8.7	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	1.7	1.0	8.5	5.1	D1
1,2,4-Trimethylbenzene	9.9	1.0	48	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	2.0	1.0	8.7	4.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-46-M-9Q3	Diln Fac:	2.260
Lab ID:	214897-002	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.6	D1
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
Trichlorofluoromethane	1.5	1.1	8.6	6.3	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
Methylene Chloride	ND	1.1	ND	3.9	D1
Freon 113	5.6	1.1	43	8.7	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	20	1.1	79	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	3.7	1.1	18	5.5	D1
1,2-Dichloroethane	ND	1.1	ND	4.6	D1
1,1,1-Trichloroethane	ND	1.1	ND	6.2	D1
Benzene	ND	1.1	ND	3.6	D1
Carbon Tetrachloride	ND	1.1	ND	7.1	D1
1,4-Dioxane	ND	1.1	ND	4.1	D1
Trichloroethene	12	1.1	64	6.1	D1
Toluene	2.3	1.1	8.5	4.3	D1
Tetrachloroethene	2.1	1.1	14	7.7	D1
Ethylbenzene	1.9	1.1	8.2	4.9	D1
m,p-Xylenes	1.2	1.1	5.2	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.6	D1
1,2,4-Trimethylbenzene	6.1	1.1	30	5.6	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.8	D1
Xylene (total)	1.2	1.1	5.2	4.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-46-L-9Q3	Diln Fac:	2.170
Lab ID:	214897-003	Batch#:	155229
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.4	D1
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
Trichlorofluoromethane	ND	1.1	ND	6.1	D1
1,1-Dichloroethene	ND	1.1	ND	4.3	D1
Methylene Chloride	ND	1.1	ND	3.8	D1
Freon 113	ND	1.1	ND	8.3	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	2.5	1.1	10	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.3	D1
1,2-Dichloroethane	ND	1.1	ND	4.4	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.9	D1
Benzene	ND	1.1	ND	3.5	D1
Carbon Tetrachloride	ND	1.1	ND	6.8	D1
1,4-Dioxane	ND	1.1	ND	3.9	D1
Trichloroethene	2.6	1.1	14	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	ND	1.1	ND	7.4	D1
Ethylbenzene	2.0	1.1	8.8	4.7	D1
m,p-Xylenes	1.3	1.1	5.6	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.3	D1
1,2,4-Trimethylbenzene	6.2	1.1	30	5.3	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.5	D1
Xylene (total)	1.3	1.1	5.6	4.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-30-U-9Q3	Diln Fac:	2.180
Lab ID:	214897-004	Batch#:	155229
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.4	D1
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
Trichlorofluoromethane	ND	1.1	ND	6.1	D1
1,1-Dichloroethene	ND	1.1	ND	4.3	D1
Methylene Chloride	ND	1.1	ND	3.8	D1
Freon 113	2.6	1.1	20	8.4	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.3	D1
1,2-Dichloroethane	ND	1.1	ND	4.4	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.9	D1
Benzene	ND	1.1	ND	3.5	D1
Carbon Tetrachloride	ND	1.1	ND	6.9	D1
1,4-Dioxane	ND	1.1	ND	3.9	D1
Trichloroethene	ND	1.1	ND	5.9	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	4.0	1.1	27	7.4	D1
Ethylbenzene	2.0	1.1	8.5	4.7	D1
m,p-Xylenes	1.2	1.1	5.2	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.4	D1
1,2,4-Trimethylbenzene	6.0	1.1	30	5.4	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.6	D1
Xylene (total)	1.2	1.1	5.2	4.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-30-M-9Q3	Diln Fac:	85.20
Lab ID:	214897-005	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	43	ND	210	D1
Vinyl Chloride	ND	43	ND	110	D1
Chloroethane	ND	43	ND	110	D1
Trichlorofluoromethane	ND	43	ND	240	D1
1,1-Dichloroethene	ND	43	ND	170	D1
Methylene Chloride	ND	43	ND	150	D1
Freon 113	ND	43	ND	330	D1
trans-1,2-Dichloroethene	ND	43	ND	170	D1
1,1-Dichloroethane	ND	43	ND	170	D1
MTBE	ND	43	ND	150	D1
cis-1,2-Dichloroethene	ND	43	ND	170	D1
n-Hexane	ND	43	ND	150	D1
Chloroform	ND	43	ND	210	D1
1,2-Dichloroethane	ND	43	ND	170	D1
1,1,1-Trichloroethane	ND	43	ND	230	D1
Benzene	130	43	420	140	D1
Carbon Tetrachloride	ND	43	ND	270	D1
1,4-Dioxane	ND	43	ND	150	D1
Trichloroethene	ND	43	ND	230	D1
Toluene	ND	43	ND	160	D1
Tetrachloroethene	ND	43	ND	290	D1
Ethylbenzene	3,700	43	16,000	180	D1
m,p-Xylenes	ND	43	ND	180	D1
o-Xylene	ND	43	ND	180	D1
1,3,5-Trimethylbenzene	ND	43	ND	210	D1
1,2,4-Trimethylbenzene	ND	43	ND	210	D1
1,4-Dichlorobenzene	ND	43	ND	260	D1
Xylene (total)	ND	85	ND	370	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	323 *	70-130	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-30-L-9Q3	Diln Fac:	12.96
Lab ID:	214897-006	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	6.5	ND	32	D1
Vinyl Chloride	ND	6.5	ND	17	D1
Chloroethane	ND	6.5	ND	17	D1
Trichlorofluoromethane	ND	6.5	ND	36	D1
1,1-Dichloroethene	7.4	6.5	29	26	D1
Methylene Chloride	ND	6.5	ND	23	D1
Freon 113	7.1	6.5	54	50	D1
trans-1,2-Dichloroethene	ND	6.5	ND	26	D1
1,1-Dichloroethane	26	6.5	110	26	D1
MTBE	ND	6.5	ND	23	D1
cis-1,2-Dichloroethene	ND	6.5	ND	26	D1
n-Hexane	ND	6.5	ND	23	D1
Chloroform	7.0	6.5	34	32	D1
1,2-Dichloroethane	ND	6.5	ND	26	D1
1,1,1-Trichloroethane	ND	6.5	ND	35	D1
Benzene	ND	6.5	ND	21	D1
Carbon Tetrachloride	ND	6.5	ND	41	D1
1,4-Dioxane	ND	6.5	ND	23	D1
Trichloroethene	34	6.5	180	35	D1
Toluene	ND	6.5	ND	24	D1
Tetrachloroethene	20	6.5	140	44	D1
Ethylbenzene	53	6.5	230	28	D1
m,p-Xylenes	ND	6.5	ND	28	D1
o-Xylene	ND	6.5	ND	28	D1
1,3,5-Trimethylbenzene	ND	6.5	ND	32	D1
1,2,4-Trimethylbenzene	ND	6.5	ND	32	D1
1,4-Dichlorobenzene	ND	6.5	ND	39	D1
Xylene (total)	ND	13	ND	56	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	P-47-9Q3	Diln Fac:	4.240
Lab ID:	214897-007	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	2.1	ND	10	D2
Vinyl Chloride	ND	2.1	ND	5.4	D2
Chloroethane	ND	2.1	ND	5.6	D2
Trichlorofluoromethane	ND	2.1	ND	12	D2
1,1-Dichloroethene	ND	2.1	ND	8.4	D2
Methylene Chloride	ND	2.1	ND	7.4	D2
Freon 113	15	2.1	110	16	D2
trans-1,2-Dichloroethene	ND	2.1	ND	8.4	D2
1,1-Dichloroethane	250	2.1	1,000	8.6	D2
MTBE	ND	2.1	ND	7.6	D2
cis-1,2-Dichloroethene	ND	2.1	ND	8.4	D2
n-Hexane	ND	2.1	ND	7.5	D2
Chloroform	2.1	2.1	10	10	D2
1,2-Dichloroethane	ND	2.1	ND	8.6	D2
1,1,1-Trichloroethane	ND	2.1	ND	12	D2
Benzene	ND	2.1	ND	6.8	D2
Carbon Tetrachloride	ND	2.1	ND	13	D2
1,4-Dioxane	ND	2.1	ND	7.6	D2
Trichloroethene	4.0	2.1	22	11	D2
Toluene	ND	2.1	ND	8.0	D2
Tetrachloroethene	ND	2.1	ND	14	D2
Ethylbenzene	15	2.1	66	9.2	D2
m,p-Xylenes	ND	2.1	ND	9.2	D2
o-Xylene	ND	2.1	ND	9.2	D2
1,3,5-Trimethylbenzene	ND	2.1	ND	10	D2
1,2,4-Trimethylbenzene	3.2	2.1	16	10	D2
1,4-Dichlorobenzene	ND	2.1	ND	13	D2
Xylene (total)	ND	4.2	ND	18	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PL-102A-9Q3	Diln Fac:	6.270
Lab ID:	214897-008	Batch#:	155742
Matrix:	Air	Sampled:	09/13/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	3.1	ND	16	D1
Vinyl Chloride	ND	3.1	ND	8.0	D1
Chloroethane	ND	3.1	ND	8.3	D1
Trichlorofluoromethane	ND	3.1	ND	18	D1
1,1-Dichloroethene	ND	3.1	ND	12	D1
Methylene Chloride	ND	3.1	ND	11	D1
Freon 113	19	3.1	140	24	D1
trans-1,2-Dichloroethene	ND	3.1	ND	12	D1
1,1-Dichloroethane	4.0	3.1	16	13	D1
MTBE	ND	3.1	ND	11	D1
cis-1,2-Dichloroethene	ND	3.1	ND	12	D1
n-Hexane	11	3.1	39	11	D1
Chloroform	ND	3.1	ND	15	D1
1,2-Dichloroethane	ND	3.1	ND	13	D1
1,1,1-Trichloroethane	ND	3.1	ND	17	D1
Benzene	4.4	3.1	14	10	D1
Carbon Tetrachloride	ND	3.1	ND	20	D1
1,4-Dioxane	ND	3.1	ND	11	D1
Trichloroethene	ND	3.1	ND	17	D1
Toluene	6.6	3.1	25	12	D1
Tetrachloroethene	ND	3.1	ND	21	D1
Ethylbenzene	43	3.1	180	14	D1
m,p-Xylenes	23	3.1	100	14	D1
o-Xylene	ND	3.1	ND	14	D1
1,3,5-Trimethylbenzene	9.1	3.1	45	15	D1
1,2,4-Trimethylbenzene	48	3.1	240	15	D1
1,4-Dichlorobenzene	ND	3.1	ND	19	D1
Xylene (total)	23	6.3	100	27	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PL-2102-9Q3	Diln Fac:	42.20
Lab ID:	214897-009	Batch#:	155742
Matrix:	Air	Sampled:	09/13/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	21	ND	100	D2
Vinyl Chloride	480	21	1,200	54	D2
Chloroethane	77	21	200	56	D2
Trichlorofluoromethane	ND	21	ND	120	D2
1,1-Dichloroethene	ND	21	ND	84	D2
Methylene Chloride	ND	21	ND	73	D2
Freon 113	ND	21	ND	160	D2
trans-1,2-Dichloroethene	ND	21	ND	84	D2
1,1-Dichloroethane	730	21	2,900	85	D2
MTBE	32	21	120	76	D2
cis-1,2-Dichloroethene	ND	21	ND	84	D2
n-Hexane	2,600	21	9,000	74	D2
Chloroform	ND	21	ND	100	D2
1,2-Dichloroethane	ND	21	ND	85	D2
1,1,1-Trichloroethane	ND	21	ND	120	D2
Benzene	140	21	440	67	D2
Carbon Tetrachloride	ND	21	ND	130	D2
1,4-Dioxane	ND	21	ND	76	D2
Trichloroethene	ND	21	ND	110	D2
Toluene	ND	21	ND	80	D2
Tetrachloroethene	ND	21	ND	140	D2
Ethylbenzene	430	21	1,900	92	D2
m,p-Xylenes	190	21	820	92	D2
o-Xylene	ND	21	ND	92	D2
1,3,5-Trimethylbenzene	35	21	170	100	D2
1,2,4-Trimethylbenzene	290	21	1,400	100	D2
1,4-Dichlorobenzene	ND	21	ND	130	D2
Xylene (total)	190	42	820	180	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	402 *	70-130	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513336	Diln Fac:	1.000
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513337

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.661	97	70-130	
Vinyl Chloride	10.00	8.186	82	70-130	
Chloroethane	10.00	9.670	97	70-130	
Trichlorofluoromethane	10.00	9.220	92	70-130	
1,1-Dichloroethene	10.00	9.900	99	70-130	
Methylene Chloride	10.00	9.790	98	70-130	
Freon 113	10.00	10.31	103	70-130	
trans-1,2-Dichloroethene	10.00	10.76	108	70-130	
1,1-Dichloroethane	10.00	10.07	101	70-130	
MTBE	10.00	10.37	104	70-130	
cis-1,2-Dichloroethene	10.00	9.453	95	70-130	
n-Hexane	10.00	9.780	98	70-130	
Chloroform	10.00	9.975	100	70-130	
1,2-Dichloroethane	10.00	9.448	94	70-130	
1,1,1-Trichloroethane	10.00	9.452	95	70-130	
Benzene	10.00	9.705	97	70-130	
Carbon Tetrachloride	10.00	7.869	79	70-130	
1,4-Dioxane	10.00	8.195	82	70-130	
Trichloroethene	10.00	9.235	92	70-130	
Toluene	10.00	10.03	100	70-130	
Tetrachloroethene	10.00	10.55	106	70-130	
Ethylbenzene	10.00	10.69	107	70-130	
m,p-Xylenes	20.00	21.12	106	70-130	
o-Xylene	10.00	10.83	108	70-130	
1,3,5-Trimethylbenzene	10.00	10.53	105	70-130	
1,2,4-Trimethylbenzene	10.00	10.54	105	70-130	
1,4-Dichlorobenzene	10.00	9.989	100	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513338

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.666	97	70-130	0	25	
Vinyl Chloride	10.00	9.130	91	70-130	11	25	
Chloroethane	10.00	9.772	98	70-130	1	25	
Trichlorofluoromethane	10.00	9.194	92	70-130	0	25	
1,1-Dichloroethene	10.00	9.984	100	70-130	1	25	
Methylene Chloride	10.00	9.634	96	70-130	2	25	
Freon 113	10.00	10.05	101	70-130	3	25	
trans-1,2-Dichloroethene	10.00	10.69	107	70-130	1	25	
1,1-Dichloroethane	10.00	9.947	99	70-130	1	25	
MTBE	10.00	10.28	103	70-130	1	25	
cis-1,2-Dichloroethene	10.00	9.158	92	70-130	3	25	
n-Hexane	10.00	9.717	97	70-130	1	25	
Chloroform	10.00	9.830	98	70-130	1	25	
1,2-Dichloroethane	10.00	9.210	92	70-130	3	25	
1,1,1-Trichloroethane	10.00	9.224	92	70-130	2	25	
Benzene	10.00	9.486	95	70-130	2	25	
Carbon Tetrachloride	10.00	7.679	77	70-130	2	25	
1,4-Dioxane	10.00	8.449	84	70-130	3	25	
Trichloroethene	10.00	9.272	93	70-130	0	25	
Toluene	10.00	9.927	99	70-130	1	25	
Tetrachloroethene	10.00	10.23	102	70-130	3	25	
Ethylbenzene	10.00	10.50	105	70-130	2	25	
m,p-Xylenes	20.00	20.98	105	70-130	1	25	
o-Xylene	10.00	10.59	106	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	10.28	103	70-130	2	25	
1,2,4-Trimethylbenzene	10.00	10.60	106	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.681	97	70-130	3	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513405	Diln Fac:	1.000
Matrix:	Air	Batch#:	155229
Units (V):	ppbv	Analyzed:	09/24/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC515432	Diln Fac:	1.000
Matrix:	Air	Batch#:	155742
Units (V):	ppbv	Analyzed:	10/06/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155742
Units (V):	ppbv	Analyzed:	10/06/09
Diln Fac:	1.000		

Type: BS Lab ID: QC515433

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.974	100	70-130	
Vinyl Chloride	10.00	9.858	99	70-130	
Chloroethane	10.00	11.43	114	70-130	
Trichlorofluoromethane	10.00	9.935	99	70-130	
1,1-Dichloroethene	10.00	10.94	109	70-130	
Methylene Chloride	10.00	7.523	75	70-130	
Freon 113	10.00	10.61	106	70-130	
trans-1,2-Dichloroethene	10.00	10.07	101	70-130	
1,1-Dichloroethane	10.00	10.14	101	70-130	
MTBE	10.00	10.81	108	70-130	
cis-1,2-Dichloroethene	10.00	10.20	102	70-130	
n-Hexane	10.00	10.49	105	70-130	
Chloroform	10.00	10.58	106	70-130	
1,2-Dichloroethane	10.00	9.397	94	70-130	
1,1,1-Trichloroethane	10.00	9.785	98	70-130	
Benzene	10.00	9.731	97	70-130	
Carbon Tetrachloride	10.00	9.601	96	70-130	
1,4-Dioxane	10.00	9.285	93	70-130	
Trichloroethene	10.00	8.492	85	70-130	
Toluene	10.00	9.926	99	70-130	
Tetrachloroethene	10.00	9.475	95	70-130	
Ethylbenzene	10.00	10.27	103	70-130	
m,p-Xylenes	20.00	20.38	102	70-130	
o-Xylene	10.00	10.13	101	70-130	
1,3,5-Trimethylbenzene	10.00	9.965	100	70-130	
1,2,4-Trimethylbenzene	10.00	10.42	104	70-130	
1,4-Dichlorobenzene	10.00	9.510	95	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214897	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155742
Units (V):	ppbv	Analyzed:	10/06/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC515434

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.568	96	70-130	4	25	
Vinyl Chloride	10.00	9.401	94	70-130	5	25	
Chloroethane	10.00	10.64	106	70-130	7	25	
Trichlorofluoromethane	10.00	9.407	94	70-130	5	25	
1,1-Dichloroethene	10.00	10.39	104	70-130	5	25	
Methylene Chloride	10.00	7.467	75	70-130	1	25	
Freon 113	10.00	10.01	100	70-130	6	25	
trans-1,2-Dichloroethene	10.00	9.659	97	70-130	4	25	
1,1-Dichloroethane	10.00	9.490	95	70-130	7	25	
MTBE	10.00	10.03	100	70-130	7	25	
cis-1,2-Dichloroethene	10.00	9.611	96	70-130	6	25	
n-Hexane	10.00	10.02	100	70-130	5	25	
Chloroform	10.00	10.01	100	70-130	6	25	
1,2-Dichloroethane	10.00	9.410	94	70-130	0	25	
1,1,1-Trichloroethane	10.00	9.634	96	70-130	2	25	
Benzene	10.00	9.778	98	70-130	0	25	
Carbon Tetrachloride	10.00	9.468	95	70-130	1	25	
1,4-Dioxane	10.00	9.509	95	70-130	2	25	
Trichloroethene	10.00	8.561	86	70-130	1	25	
Toluene	10.00	9.667	97	70-130	3	25	
Tetrachloroethene	10.00	9.459	95	70-130	0	25	
Ethylbenzene	10.00	10.12	101	70-130	1	25	
m,p-Xylenes	20.00	20.14	101	70-130	1	25	
o-Xylene	10.00	9.896	99	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	9.844	98	70-130	1	25	
1,2,4-Trimethylbenzene	10.00	10.26	103	70-130	2	25	
1,4-Dichlorobenzene	10.00	9.401	94	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209384333002 File : 266_002 Time : 23-SEP-2009 19:34

Standards: S12824 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	61944	11.39	
75	30% - 66% of mass 95	212210	39.01	
95		544034	100.00	
96	5% - 9% of mass 95	30865	5.67	
173	< 2% of mass 174	623	0.21	
174	50% - 120% of mass 95	296983	54.59	
175	4% - 9% of mass 174	20194	6.80	
176	93% - 101% of mass 174	294550	99.18	
177	5% - 9% of mass 176	18794	6.38	

CURTIS & TOMPKINS BFB TUNE FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209402039015 File : 278_015 Time : 05-OCT-2009 23:31

Standards: S13044 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	71543	11.09	
75	30% - 66% of mass 95	239418	37.11	
95		645234	100.00	
96	5% - 9% of mass 95	38635	5.99	
173	< 2% of mass 174	610	0.17	
174	50% - 120% of mass 95	353664	54.81	
175	4% - 9% of mass 174	26866	7.60	
176	93% - 101% of mass 174	341791	96.64	
177	5% - 9% of mass 176	23681	6.93	

CURTIS & TOMPKINS BFB TUNE FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209402865001 File : 279_001 Time : 06-OCT-2009 18:25

Standards: S13044

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62910	10.61	
75	30% - 66% of mass 95	222645	37.56	
95		592802	100.00	
96	5% - 9% of mass 95	40306	6.80	
173	< 2% of mass 174	1137	0.34	
174	50% - 120% of mass 95	337376	56.91	
175	4% - 9% of mass 174	22919	6.79	
176	93% - 101% of mass 174	327469	97.06	
177	5% - 9% of mass 176	22059	6.74	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214897 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	**26**	33.33	5	50.00	-7	100.0	**-31**
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	**24**	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	**24**	5.000	-12	10.00	**-56**	16.67	**31**	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	**-39**	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	**-22**
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	**-25**
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	**-21**
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	**-22**	1.667	0	5.000	-12	10.00	-8	16.67	**23**	33.33	**30**				
Trichloroethene	0.167	**25**	0.500	1	1.667	**26**	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	**-21**	100.0	**-40**
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	**25**	0.500	3	1.667	**25**	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	**-28**
Ethylbenzene	0.167	**22**	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	**-31**
m,p-Xylenes	0.333	**26**	1.000	8	3.333	**22**	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	**-35**
o-Xylene	0.167	**31**	0.500	5	1.667	**25**	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	**-24**	100.0	**-33**
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	**22**	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	**-27**
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	**26**	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	**-30**
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214897 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001
Units : nL/L

Date : 06-OCT-2009 03:40
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	278_019	1209402039019	NONE	06-OCT-2009 03:40	S13093 (2X), S13044 (15X)
L2	278_020	1209402039020	NONE	06-OCT-2009 04:39	S13092 (6X), S13044 (15X)
L3	278_021	1209402039021	NONE	06-OCT-2009 05:40	S13092 (2X), S13044 (15X)
L4	278_022	1209402039022	NONE	06-OCT-2009 06:39	S13092, S13044 (15X)
L5	278_023	1209402039023	NONE	06-OCT-2009 07:39	S13091 (6X), S13044 (15X)
L6	278_024	1209402039024	NONE	06-OCT-2009 08:39	S13091 (3X), S13044 (15X)
L7	278_025	1209402039025	NONE	06-OCT-2009 09:38	S13091 (2X), S13044 (15X)
L8	278_026	1209402039026	NONE	06-OCT-2009 10:38	S13091, S13044 (15X)
L9	278_030	1209402039030	NONE	06-OCT-2009 14:38	S13093 (6X), S13044 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	2.8405	3.3043	2.8800	2.6790	3.2536	2.7319	2.6142	2.3262	3.3901	AVRG		0.34589		2.8911	12	0.99	30	
Vinyl Chloride	0.4208m	0.5795m	0.5394m	0.5316	0.6977	0.6186	0.6731	0.5454	0.3688m	AVRG		1.80906		0.5528	19	0.99	30	
Chloroethane	0.0535m	0.0761	0.0732	0.0727	0.0929	0.0737	0.0659	0.0459	0.0586m	AVRG		14.6930		0.0681	20	0.99	30	
Trichlorofluoromethane	3.5742	4.1688	3.6361	3.3806	4.0861	3.4093	3.1916	2.8640	4.5297	AVRG		0.27405		3.6489	14	0.99	30	
1,1-Dichloroethene	0.9224	1.2213	1.0764	1.0199	1.3098	1.0559	0.9810	0.7957	1.0367	AVRG		0.95551		1.0466	15	0.99	30	
Methylene Chloride	0.6289m	1.2623m	0.7372m	0.7054	1.4280	0.9114	0.9503		1.1201	AVRG		1.03311		0.9679	29	0.99	30	
Freon 113	2.6647	3.0476	2.6608	2.4612	2.8819	2.4253	2.2488	1.9144	3.2988	AVRG		0.38130		2.6226	16	0.99	30	
trans-1,2-Dichloroethene	1.7451	2.1915	1.9357	1.7717	2.2645	1.8472	1.7026	1.3654	2.1393	AVRG		0.53057		1.8848	15	0.99	30	
1,1-Dichloroethane	2.0868	2.4714	2.1346	2.0356m	2.5074	2.1759	2.1059	1.9411	2.4710	AVRG		0.45159		2.2144	10	0.99	30	
MTBE	1.0124m	1.2977	1.1781	1.1085	1.3443	1.1082	1.0351	0.8656	1.1082m	AVRG		0.89480		1.1176	13	0.99	30	
cis-1,2-Dichloroethene	1.7870	2.2028	1.8824	1.7244	2.2864	1.8581	1.7266	1.3931	2.1233	AVRG		0.52991		1.8871	15	0.99	30	
n-Hexane	0.7627	0.9403	0.8097	0.7731	0.9653	0.7782	0.7471	0.6427	0.9276	AVRG		1.22505		0.8163	13	0.99	30	
Chloroform	2.4294	2.7477	2.3978	2.1577	2.5645	2.0228	1.9130	1.5088	2.9417	AVRG		0.43513		2.2982	19	0.99	30	
1,2-Dichloroethane	0.5984	0.7249	0.6240	0.5795	0.7308	0.6501	0.5984	0.5484	0.7337	AVRG		1.55489		0.6431	11	0.99	30	
1,1,1-Trichloroethane	0.8381	0.9510	0.8170	0.7503	0.8935m	0.8025	0.7611	0.7118	0.9990	AVRG		1.19613		0.8360	11	0.99	30	
Benzene	0.4250	0.5015	0.4268	0.3964	0.4716	0.4139	0.3838	0.3454	0.5220	AVRG		2.31577		0.4318	13	0.99	30	
Carbon Tetrachloride	0.9828	1.1201	0.9721	0.9071	1.1126	0.9860	0.9275	0.8970	1.1935	AVRG		0.98915		1.0110	10	0.99	30	
1,4-Dioxane	0.0957	0.1300	0.1199	0.1300m	0.1925				0.1063m	AVRG		7.74826		0.1291	26	0.99	30	
Trichloroethene	0.4738	0.8220	0.6773	0.5859	0.5161	0.4278	0.3784m			AVRG		1.80353		0.5545	28	0.99	30	
Toluene	1.3988	1.7195	1.4640	1.4269	1.7009	1.4817	1.3702	1.2342	1.6037	AVRG		0.67164		1.4889	11	0.99	30	
Tetrachloroethene	0.5457	0.6275	0.5159	0.4729	0.5450	0.4758	0.4154	0.3541	0.6342	AVRG		1.96228		0.5096	18	0.99	30	
Ethylbenzene	1.7573	2.2065	1.8689	1.7757	2.1207	1.7156	1.5669	1.3132	1.9844	AVRG		0.55184		1.8121	15	0.99	30	
m,p-Xylenes	1.7649	2.1417m	1.7770m	1.6502m	1.9262	1.5282	1.3253m	1.1120	1.9850	AVRG		0.59170		1.6901	19	0.99	30	
o-Xylene	1.7386	1.9975	1.6749	1.5506	1.7626	1.3408	1.1776	1.0433	1.9223	AVRG		0.63344		1.5787	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.1410	2.6275	2.1521	2.0061	2.4538	1.9641	1.8206	1.5516	2.3024	AVRG		0.47320		2.1133	15	0.99	30	
1,2,4-Trimethylbenzene	1.8528	2.4939	2.1088	1.9492	2.3110	1.8994	1.6872	1.4222	1.7971	AVRG		0.51365		1.9469	17	0.99	30	
1,4-Dichlorobenzene	1.2918	1.5261	1.2552	1.2199	1.5010	1.3011	1.2117	1.1014	1.4237	AVRG		0.76067		1.3146	11	0.99	30	
Bromofluorobenzene	0.7460	0.7780	0.7557	0.7722	0.7890	0.7898	0.7709	0.7833	0.7743	AVRG		1.29326		0.7732	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	13	33.33	-6	50.00	-10	100.0	-20	0.167	17
Vinyl Chloride	0.500	**-24**	1.667	5	5.000	-2	10.00	-4	16.67	**26**	33.33	12	50.00	**22**	100.0	-1	0.167	**-33**
Chloroethane	0.500	**-21**	1.667	12	5.000	8	10.00	7	16.67	**36**	33.33	8	50.00	-3	100.0	**-33**	0.167	-14
Trichlorofluoromethane	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	12	33.33	-7	50.00	-13	100.0	**-22**	0.167	**24**
1,1-Dichloroethene	0.500	-12	1.667	17	5.000	3	10.00	-3	16.67	**25**	33.33	1	50.00	-6	100.0	**-24**	0.167	-1
Methylene Chloride	0.500	**-35**	1.667	**30**	5.000	**-24**	10.00	**-27**	16.67	**48**	33.33	-6	50.00	-2			0.167	16
Freon 113	0.500	2	1.667	16	5.000	1	10.00	-6	16.67	10	33.33	-8	50.00	-14	100.0	**-27**	0.167	**26**
trans-1,2-Dichloroethene	0.500	-7	1.667	16	5.000	3	10.00	-6	16.67	20	33.33	-2	50.00	-10	100.0	**-28**	0.167	14
1,1-Dichloroethane	0.500	-6	1.667	12	5.000	-4	10.00	-8	16.67	13	33.33	-2	50.00	-5	100.0	-12	0.167	12
MTBE	0.500	-9	1.667	16	5.000	5	10.00	-1	16.67	20	33.33	-1	50.00	-7	100.0	**-23**	0.167	-1
cis-1,2-Dichloroethene	0.500	-5	1.667	17	5.000	0	10.00	-9	16.67	**21**	33.33	-2	50.00	-9	100.0	**-26**	0.167	13
n-Hexane	0.500	-7	1.667	15	5.000	-1	10.00	-5	16.67	18	33.33	-5	50.00	-8	100.0	**-21**	0.167	14
Chloroform	0.500	6	1.667	20	5.000	4	10.00	-6	16.67	12	33.33	-12	50.00	-17	100.0	**-34**	0.167	**28**
1,2-Dichloroethane	0.500	-7	1.667	13	5.000	-3	10.00	-10	16.67	14	33.33	1	50.00	-7	100.0	-15	0.167	14
1,1,1-Trichloroethane	0.500	0	1.667	14	5.000	-2	10.00	-10	16.67	7	33.33	-4	50.00	-9	100.0	-15	0.167	19
Benzene	0.500	-2	1.667	16	5.000	-1	10.00	-8	16.67	9	33.33	-4	50.00	-11	100.0	-20	0.167	**21**
Carbon Tetrachloride	0.500	-3	1.667	11	5.000	-4	10.00	-10	16.67	10	33.33	-2	50.00	-8	100.0	-11	0.167	18
1,4-Dioxane	0.500	**-26**	1.667	1	5.000	-7	10.00	1	16.67	**49**							0.167	-18
Trichloroethene	0.500	-15	1.667	**48**	5.000	**22**	10.00	6	16.67	-7	33.33	**-23**	50.00	**-32**				
Toluene	0.500	-6	1.667	15	5.000	-2	10.00	-4	16.67	14	33.33	0	50.00	-8	100.0	-17	0.167	8
Tetrachloroethene	0.500	7	1.667	**23**	5.000	1	10.00	-7	16.67	7	33.33	-7	50.00	-18	100.0	**-31**	0.167	**24**
Ethylbenzene	0.500	-3	1.667	**22**	5.000	3	10.00	-2	16.67	17	33.33	-5	50.00	-14	100.0	**-28**	0.167	10
m,p-Xylenes	1.000	4	3.333	**27**	10.00	5	20.00	-2	33.33	14	66.67	-10	100.0	**-22**	200.0	**-34**	0.333	17
o-Xylene	0.500	10	1.667	**27**	5.000	6	10.00	-2	16.67	12	33.33	-15	50.00	**-25**	100.0	**-34**	0.167	**22**
1,3,5-Trimethylbenzene	0.500	1	1.667	**24**	5.000	2	10.00	-5	16.67	16	33.33	-7	50.00	-14	100.0	**-27**	0.167	9
1,2,4-Trimethylbenzene	0.500	-5	1.667	**28**	5.000	8	10.00	0	16.67	19	33.33	-2	50.00	-13	100.0	**-27**	0.167	-8
1,4-Dichlorobenzene	0.500	-2	1.667	16	5.000	-5	10.00	-7	16.67	14	33.33	-1	50.00	-8	100.0	-16	0.167	8
Bromofluorobenzene	10.00	-4	10.00	1	10.00	-2	10.00	0	10.00	2	10.00	2	10.00	0	10.00	1	10.00	0

SJD 10/06/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001 Cal Date : 06-OCT-2009

ICV 1209402039031 (278_031 06-OCT-2009) stds: S13086, S13044 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.813	nL/L	-2	30	
Vinyl Chloride	10.00	10.60	nL/L	6	30	m
Chloroethane	10.00	10.99	nL/L	10	30	
Trichlorofluoromethane	10.00	9.671	nL/L	-3	30	
1,1-Dichloroethene	10.00	10.58	nL/L	6	30	
Methylene Chloride	10.00	7.287	nL/L	**-27**	30	!v-
Freon 113	10.00	10.31	nL/L	3	30	
trans-1,2-Dichloroethene	10.00	9.859	nL/L	-1	30	
1,1-Dichloroethane	10.00	9.627	nL/L	-4	30	
MTBE	10.00	10.22	nL/L	2	30	
cis-1,2-Dichloroethene	10.00	9.793	nL/L	-2	30	
n-Hexane	10.00	9.975	nL/L	0	30	
Chloroform	10.00	10.20	nL/L	2	30	
1,2-Dichloroethane	10.00	9.524	nL/L	-5	30	
1,1,1-Trichloroethane	10.00	9.886	nL/L	-1	30	
Benzene	10.00	9.859	nL/L	-1	30	
Carbon Tetrachloride	10.00	9.546	nL/L	-5	30	
1,4-Dioxane	10.00	9.502	nL/L	-5	30	
Trichloroethene	10.00	8.640	nL/L	-14	30	
Toluene	10.00	9.721	nL/L	-3	30	
Tetrachloroethene	10.00	9.095	nL/L	-9	30	
Ethylbenzene	10.00	10.05	nL/L	0	30	
m,p-Xylenes	20.00	19.74	nL/L	-1	30	m
o-Xylene	10.00	9.758	nL/L	-2	30	
1,3,5-Trimethylbenzene	10.00	9.827	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	10.02	nL/L	0	30	
1,4-Dichlorobenzene	10.00	9.097	nL/L	-9	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC513337 IDF : 1.0
Seqnum : 1209384333003.2 File : 266_003 Time : 23-SEP-2009 20:34
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.8780	10.00	9.661	nL/L	-3	30	u
Vinyl Chloride	0.8099	0.6628	10.00	8.186	nL/L	-18	30	u
Chloroethane	0.0783	0.0757	10.00	9.670	nL/L	-3	30	u
Trichlorofluoromethane	3.8163	3.5173	10.00	9.220	nL/L	-8	30	u
1,1-Dichloroethene	1.1450	1.1332	10.00	9.900	nL/L	-1	30	u
Methylene Chloride	0.7638	0.7477	10.00	9.790	nL/L	-2	30	u
Freon 113	2.6173	2.6982	10.00	10.31	nL/L	3	30	u
trans-1,2-Dichloroethene	1.7822	1.9179	10.00	10.76	nL/L	8	30	!v- u
1,1-Dichloroethane	2.2048	2.2188	10.00	10.07	nL/L	1	30	u
MTBE	1.1668	1.2093	10.00	10.37	nL/L	4	30	u
cis-1,2-Dichloroethene	2.0400	1.9273	10.00	9.453	nL/L	-5	30	u
n-Hexane	0.8500	0.8311	10.00	9.780	nL/L	-2	30	u
Chloroform	2.3937	2.3868	10.00	9.975	nL/L	0	30	u
1,2-Dichloroethane	0.6592	0.6226	10.00	9.448	nL/L	-6	30	u
1,1,1-Trichloroethane	0.8700	0.8222	10.00	9.452	nL/L	-5	30	u
Benzene	0.4460	0.4326	10.00	9.705	nL/L	-3	30	u
Carbon Tetrachloride	1.0378	0.8164	10.00	7.869	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1164	10.00	8.195	nL/L	-18	30	!v- u
Trichloroethene	0.5119	0.4725	10.00	9.235	nL/L	-8	30	u
Toluene	1.5952	1.5998	10.00	10.03	nL/L	0	30	u
Tetrachloroethene	0.5206	0.5492	10.00	10.55	nL/L	6	30	u
Ethylbenzene	1.9165	2.0483	10.00	10.69	nL/L	7	30	u
m,p-Xylenes	1.7645	1.8639	20.00	21.12	nL/L	6	30	m u
o-Xylene	1.6441	1.7807	10.00	10.83	nL/L	8	30	u
1,3,5-Trimethylbenzene	2.1384	2.2515	10.00	10.53	nL/L	5	30	u
1,2,4-Trimethylbenzene	2.0458	2.1565	10.00	10.54	nL/L	5	30	u
1,4-Dichlorobenzene	1.3357	1.3342	10.00	9.989	nL/L	0	30	u
Bromofluorobenzene	0.7384	0.7289	10.00	9.871	nL/L	-1	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	850929	-26.61	27.15	27.20	0.05
1,4-Difluorobenzene	4209375	3132000	-25.59	31.87	31.93	0.06
Chlorobenzene-d5	3611816	2549000	-29.43	41.74	41.79	0.05

SJD 10/04/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214897 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC515433 IDF : 1.0
Seqnum : 1209402865002.2 File : 279_002 Time : 06-OCT-2009 20:46
Cal : 1209402039001 Caldate : 06-OCT-2009
Standards: S13086, S13044 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.8911	2.8830	10.00	9.974	nL/L	0	30	u
Vinyl Chloride	0.5528	0.5448	10.00	9.858	nL/L	-1	30	u
Chloroethane	0.0681	0.0778	10.00	11.43	nL/L	14	30	u
Trichlorofluoromethane	3.6489	3.6242	10.00	9.935	nL/L	-1	30	u
1,1-Dichloroethene	1.0466	1.1448	10.00	10.94	nL/L	9	30	u
Methylene Chloride	0.9679	0.7280	10.00	7.523	nL/L	-25	30	!v- u
Freon 113	2.6226	2.7820	10.00	10.61	nL/L	6	30	u
trans-1,2-Dichloroethene	1.8848	1.8988	10.00	10.07	nL/L	1	30	u
1,1-Dichloroethane	2.2144	2.2453	10.00	10.14	nL/L	1	30	u
MTBE	1.1176	1.2069	10.00	10.81	nL/L	8	30	u
cis-1,2-Dichloroethene	1.8871	1.9252	10.00	10.20	nL/L	2	30	u
n-Hexane	0.8163	0.8556	10.00	10.49	nL/L	5	30	u
Chloroform	2.2982	2.4306	10.00	10.58	nL/L	6	30	u
1,2-Dichloroethane	0.6431	0.6042	10.00	9.397	nL/L	-6	30	u
1,1,1-Trichloroethane	0.8360	0.8177	10.00	9.785	nL/L	-2	30	u
Benzene	0.4318	0.4200	10.00	9.731	nL/L	-3	30	u
Carbon Tetrachloride	1.0110	0.9700	10.00	9.601	nL/L	-4	30	u
1,4-Dioxane	0.1291	0.1198	10.00	9.285	nL/L	-7	30	u
Trichloroethene	0.5545	0.4706	10.00	8.492	nL/L	-15	30	u
Toluene	1.4889	1.4778	10.00	9.926	nL/L	-1	30	u
Tetrachloroethene	0.5096	0.4828	10.00	9.475	nL/L	-5	30	u
Ethylbenzene	1.8121	1.8601	10.00	10.27	nL/L	3	30	u
m,p-Xylenes	1.6901	1.7220	20.00	20.38	nL/L	2	30	u
o-Xylene	1.5787	1.5983	10.00	10.13	nL/L	1	30	u
1,3,5-Trimethylbenzene	2.1133	2.1055	10.00	9.965	nL/L	0	30	u
1,2,4-Trimethylbenzene	1.9469	2.0280	10.00	10.42	nL/L	4	30	u
1,4-Dichlorobenzene	1.3146	1.2500	10.00	9.510	nL/L	-5	30	u
Bromofluorobenzene	0.7732	0.7826	10.00	10.12	nL/L	1	30	u

ISTD (ICAL 278_025)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	924937	831070	-10.15	27.18	27.20	0.02
1,4-Difluorobenzene	3256000	3100000	-4.79	31.90	31.93	0.03
Chlorobenzene-d5	2877000	2788000	-3.09	41.76	41.79	0.03

SJD 10/12/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209384333

Date : 09/23/09 Reference : 244_010
Sequence : MSAIR01 266 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
003	CCV/BS	QC513337	850929	27.20	3132000	31.93	2549000	41.79
004	BSD	QC513338	840021	27.20	3111000	31.93	2539000	41.79
005	BLANK	QC513336	946099	27.21	3290000	31.94	2695000	41.79
006	BLANK	QC513405	876460	27.21	3104000	31.94	2533000	41.79
007	SAMPLE	214891-002	864462	27.20	3143335	31.93	2471656	41.79
008	SAMPLE	214891-005	829890	27.20	3103636	31.93	2416424	41.79
009	SAMPLE	214891-007	855717	27.20	3026512	31.93	2400204	41.79
010	SAMPLE	214891-008	847271	27.20	3022175	31.93	2439920	41.79
011	SAMPLE	214891-009	829740	27.21	3010455	31.93	2293633	41.79
012	SAMPLE	214891-010	822224	27.21	2955913	31.93	2294897	41.79
013	SAMPLE	214891-011	841951	27.18	2957287	31.91	2341916	41.76
014	SAMPLE	214897-001	845698	27.19	3049501	31.91	2334987	41.77
015	SAMPLE	214897-002	752259	27.20	2690205	31.92	2194700	41.77
016	SAMPLE	214897-003	833872	27.19	2982782	31.91	2350841	41.76
017	SAMPLE	214897-004	844130	27.18	2952000	31.91	2352000	41.77
018	SAMPLE	214897-007	795713	27.20	2957514	31.94	2159400 *	41.80
019	SAMPLE	214897-008	864386	27.20	3132973	31.93	1968673 *	41.80
020	SAMPLE	214897-009	755321	27.23	2805000	31.97	285245 *	41.87
021	SAMPLE	214897-005	552916 *	27.22	2037000 *	31.95	1456000 *	41.82
022	SAMPLE	214897-006	594257 *	27.22	2149925 *	31.94	1726863 *	41.80
023	SAMPLE	214897-002	591573 *	27.21	2186000 *	31.94	1688000 *	41.79
024	SAMPLE	214897-006	682514 *	27.21	2411000 *	31.94	1903000 *	41.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209402865

Date : 10/06/09 Reference : 278_025
Sequence : MSAIR01 279 Analyzed : 10/06/09 09:38

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	924937	27.18	3256000	31.90	2877000	41.76
		LOWER LIMIT	554962	26.85	1953600	31.57	1726200	41.43
		UPPER LIMIT	1294912	27.51	4558400	32.23	4027800	42.09
002	CCV/BS	QC515433	831070	27.20	3100000	31.93	2788000	41.79
003	BSD	QC515434	857897	27.19	3068000	31.92	2794000	41.78
004	BLANK	QC515432	920309	27.21	3231000	31.93	2916000	41.79
005	SAMPLE	214904-004	835912	27.20	3087000	31.93	2470000	41.79
006	SAMPLE	214904-005	904191	27.20	3306000	31.93	2743000	41.79
007	SAMPLE	214904-006	884014	27.21	3248000	31.93	2692000	41.79
008	SAMPLE	214904-009	881274	27.21	3295000	31.93	2632000	41.79
009	SAMPLE	214897-009	915050	27.21	3292000	31.94	2348000	41.80
010	SAMPLE	214904-001	871625	27.21	3198000	31.94	2854000	41.80
011	SAMPLE	214897-002	905062	27.20	3338000	31.93	2927000	41.79
012	SAMPLE	214897-005	915903	27.22	3295000	31.94	2351000	41.81
013	SAMPLE	214897-006	873536	27.21	3232000	31.94	2616000	41.80
014	SAMPLE	214897-007	900238	27.21	3249000	31.93	2770000	41.79
015	SAMPLE	214897-008	908504	27.20	3256000	31.92	2492000	41.79
016	SAMPLE	214904-005	898909	27.20	3258000	31.92	2773000	41.78
017	SAMPLE	214897-009	905974	27.21	3281000	31.93	2279000	41.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209384333

Instrument : MSAIR01 Begun : 09/23/09 18:35
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	266_001	X	BFB			09/23/09 18:35	1.0	1	
002	266_002	TUN	BFB	Air		09/23/09 19:34	1.0	1	
003	266_003	CCV/BS	QC513337	Air	155229	09/23/09 20:34	1.0	2 1	
004	266_004	BSD	QC513338	Air	155229	09/23/09 21:33	1.0	2 1	
005	266_005	BLANK	QC513336	Air	155229	09/23/09 22:33	1.0	1	
006	266_006	BLANK	QC513405	Air	155229	09/24/09 00:07	1.0	1	
007	266_007	SAMPLE	214891-002	Air	155229	09/24/09 01:07	12.48	1	
008	266_008	SAMPLE	214891-005	Air	155229	09/24/09 02:08	6.12	1	
009	266_009	SAMPLE	214891-007	Air	155229	09/24/09 03:08	2.58	1	
010	266_010	SAMPLE	214891-008	Air	155229	09/24/09 04:08	2.24	1	
011	266_011	SAMPLE	214891-009	Air	155229	09/24/09 05:08	2.34	1	
012	266_012	SAMPLE	214891-010	Air	155229	09/24/09 06:07	2.25	1	
013	266_013	SAMPLE	214891-011	Air	155229	09/24/09 07:07	12.72	1	
014	266_014	SAMPLE	214897-001	Air	155229	09/24/09 08:08	2.06	1	
015	266_015	SAMPLE	214897-002	Air	155229	09/24/09 09:08	2.26	1	
016	266_016	SAMPLE	214897-003	Air	155229	09/24/09 10:07	2.17	1	
017	266_017	SAMPLE	214897-004	Air	155229	09/24/09 11:07	2.18	1	
018	266_018	SAMPLE	214897-007	Air	155229	09/24/09 12:06	2.12	1	1:DCA11=130
019	266_019	SAMPLE	214897-008	Air	155229	09/24/09 13:06	2.09	1	
020	266_020	SAMPLE	214897-009	Air	155229	09/24/09 14:06	2.11	1	8:CYHEXANE=1200
021	266_021	SAMPLE	214897-005	Air	155229	09/24/09 15:06	42.60	1	1:CYHEXANE=110
022	266_022	SAMPLE	214897-006	Air	155229	09/24/09 16:06	129.6	1	
023	266_023	SAMPLE	214897-002	Air	155229	09/24/09 18:09	2.26	1	
024	266_024	SAMPLE	214897-006	Air	155229	09/24/09 19:09	43.20	1	

SJD 10/04/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 24.

BO 10/05/09 : Matrix spikes were not performed for this analysis in batch 155229 because they are not required by the method.

Analyst: SJD Date: 10/04/09 Reviewer: BO Date: 10/05/09

Standards used: 1=S12824 2=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209402039

Instrument : MSAIR01 Begun : 10/05/09 09:34
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	278_001	X	BFB			10/05/09 09:34	1.0	1	
002	278_002	X	QC515024	Air	155636	10/05/09 10:34	1.0	2 1	
003	278_003	X	QC515025	Air	155636	10/05/09 11:34	1.0	2 1	
004	278_004	X	NONE			10/05/09 12:33	1.0	1	
005	278_005	X	CALIB IB			10/05/09 13:33	1.0	1	
006	278_006	X	NONE			10/05/09 14:33	1.0	3 1	
007	278_007	X	NONE			10/05/09 15:32	1.0	3 1	
008	278_008	X	NONE			10/05/09 16:32	1.0	4 1	
009	278_009	X	NONE			10/05/09 17:33	1.0	4 1	
010	278_010	X	NONE			10/05/09 18:32	1.0	4 1	
011	278_011	X	NONE			10/05/09 19:32	1.0	5 1	
012	278_012	X	NONE			10/05/09 20:32	1.0	5 1	
013	278_013	X	NONE			10/05/09 21:32	1.0	5 1	
014	278_014	X	NONE			10/05/09 22:31	1.0	5 1	
015	278_015	TUN	BFB			10/05/09 23:31	1.0	1	
016	278_016	X	NONE			10/06/09 00:30	1.0	2 1	
017	278_017	IB	CALIB IB			10/06/09 01:41	1.0	1	
018	278_018	X	NONE			10/06/09 02:40	1.0	3 1	
019	278_019	ICAL	NONE			10/06/09 03:40	1.0	3 1	
020	278_020	ICAL	NONE			10/06/09 04:39	1.0	4 1	
021	278_021	ICAL	NONE			10/06/09 05:40	1.0	4 1	
022	278_022	ICAL	NONE			10/06/09 06:39	1.0	4 1	
023	278_023	ICAL	NONE			10/06/09 07:39	1.0	5 1	
024	278_024	ICAL	NONE			10/06/09 08:39	1.0	5 1	
025	278_025	ICAL	NONE			10/06/09 09:38	1.0	5 1	
026	278_026	ICAL	NONE			10/06/09 10:38	1.0	5 1	
027	278_027	IB	NONE			10/06/09 11:38	1.0	1	
028	278_028	XICV	NONE			10/06/09 12:38	1.0	2 1	
029	278_029	IB	NONE			10/06/09 13:38	1.0	1	
030	278_030	ICAL	NONE			10/06/09 14:38	1.0	3 1	
031	278_031	ICV	NONE			10/06/09 15:39	1.0	2 1	

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

BO 10/07/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: SJD Date: 10/06/09 Reviewer: BO Date: 10/07/09

Standards used: 1=S13044 2=S13086 3=S13093 4=S13092 5=S13091

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209402865

Instrument : MSAIR01 Begun : 10/06/09 18:25
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	279_001	TUN	BFB			10/06/09 18:25	1.0	1	
002	279_002	CCV/BS	QC515433	Air	155742	10/06/09 20:46	1.0	2 1	
003	279_003	BSD	QC515434	Air	155742	10/06/09 21:46	1.0	2 1	
004	279_004	BLANK	QC515432	Air	155742	10/06/09 22:46	1.0	1	
005	279_005	SAMPLE	214904-004	Air	155742	10/06/09 23:46	26.52	1	
006	279_006	SAMPLE	214904-005	Air	155742	10/07/09 00:47	13.80	1	1:TCE=62
007	279_007	SAMPLE	214904-006	Air	155742	10/07/09 01:48	13.14	1	
008	279_008	SAMPLE	214904-009	Air	155742	10/07/09 02:48	26.64	1	
009	279_009	SAMPLE	214897-009	Air	155742	10/07/09 03:49	42.20	1	1:CYHEXANE=120
010	279_010	SAMPLE	214904-001	Air	155742	10/07/09 04:49	9.33	1	
011	279_011	SAMPLE	214897-002	Air	155742	10/07/09 05:48	2.26	1	
012	279_012	SAMPLE	214897-005	Air	155742	10/07/09 06:47	85.20	1	
013	279_013	SAMPLE	214897-006	Air	155742	10/07/09 07:47	12.96	1	
014	279_014	SAMPLE	214897-007	Air	155742	10/07/09 08:48	4.24	1	
015	279_015	SAMPLE	214897-008	Air	155742	10/07/09 09:47	6.27	1	
016	279_016	SAMPLE	214904-005	Air	155742	10/07/09 10:47	27.60	1	
017	279_017	SAMPLE	214897-009	Air	155742	10/07/09 11:48	84.40	1	

SJD 10/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

BO 10/12/09 : Matrix spikes were not performed for this analysis in batch 155742 because they are not required by the method.

Analyst: SJD Date: 10/12/09 Reviewer: BO Date: 10/12/09

Standards used: 1=S13044 2=S13086

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PROJECT _____ **Notebook No.** _____

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Prepared by / Date	Sample ID	DAN ID	Initial (psi) pressure	Final (psi) pressure	Dilution factor	Comments
9/21 Apr	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.82	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00023
	004	C00031	1	30.00	39.8x	20x of C00107 sample 1.99x
9/22/09 Apr	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1703	—	—	1x	
9/23/09 Apr	214897-001	C00091	10.79	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed | Date | Signed | Date

PROJECT _____ Continued From Page _____

~~Property~~ Date	Sample ID	CAN ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23 MAP	214897-005	C00014	1.5 added	30.00	42.6x	20x of 2.13 x C00110
↓	→ 006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
5009/26/07	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00055	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.13	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1203	—	—	1x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

PROJECT

Notebook No.

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Performed by Date	Sample ID	PANID	Initial (psig) pressure	Final (psig) pressure	Dilution Factor	Comments
9/21 AM	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.82	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00062
	004	C00031	↓	30.00	39.8x	20x of C00109 sample 1.99x
9/22 04 AM	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1703	—	—	1x	
9/23 09 AM	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed Date Signed Date

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~~Mapping~~ Date	Sample ID	Can ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23/09 AP	214897-005	C00014	1.5 added	30.0	42.6x	20x of 2.13 x C00110
↓	↓ 006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
Soo 9/26/09	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00058	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.13	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1703	—	—	1x	
Soo 10/6/09	214897-009	C00017	1.5 added	30.0 total	42.2x	20x of 2.11x can C00062
↓	214999-004	C00212	1.5 added	30.0 total	43.2x	20x of 2.16x can C00052
	215048-001	C00220	1.5 added	30.0 total	44.2x	20x of 2.21x can C00140
↓	BLANK	C1705	—	—	1x	
Soo 10/8/09	214999 -1	C00045	3.0 added	30.0 total	22.2x	10x of 2.22x can C00064
↓	↓ -2	C00213	1.5 added	30.0 total	44.4x	20x of 2.22x can C00124
	BLANK	C00227	—	—	1x	

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214899
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
SMW-1-M-9Q3	214899-001
SMW-1-U-9Q3	214899-002
SMW-1-L-9Q3	214899-003
SMW-3-U-9Q3	214899-004
SMW-3-M-9Q3	214899-005
SMW-3-L-9Q3	214899-006
BSVE-SVM-9Q3-007	214899-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/06/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214899**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/15/09**
Samples Received:	**09/15/09**

This data package contains sample and QC results for seven air samples, requested for the above referenced project on 09/15/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
Methylene chloride was detected above the RL in SMW-3-L-9Q3 (lab # 214899-006) and BSVE-SVM-9Q3-007 (lab # 214899-007); this analyte is a common laboratory contaminant.

A number of samples were diluted due to passive grab sampling.

SMW-1-L-9Q3 (lab # 214899-003) and SMW-3-U-9Q3 (lab # 214899-004) were diluted due to problematic matrix.

No other analytical problems were encountered.

Chain of Custody

214899

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40053.65443
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: Irail Gomez Lopez
PO # 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.

	Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (TO-15)	Methane and TPH (TO-3)	O2 and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
											Units						
1	SMW-1-M	20	25	SMW-1-M-9Q3	090709	1113 ~~1058~~	AIR	AIR	REG	1	G	N	X				119
2	SMW-1-U	5	9	SMW-1-U-9Q3	090709	1054	AIR	AIR	REG	1	G	N	X				152
3	SMW-1-L	55	65.05	SMW-1-L-9Q3	090709	1151	AIR	AIR	REG	1	G	N	X				165
4	SMW-3-U	5	9	SMW-3-U-9Q3	090709	1235	AIR	AIR	REG	1	G	N	X				93
5	SMW-3-M	20	25	SMW 3-M-9Q3	090709	1252	AIR	AIR	REG	1	G	N	X				177
6	SMW-3-L	55	64.33	SMW-3-L-9Q3	090709	1315	AIR	AIR	REG	1	G	N	X				144
7	FIELD QC	—	—	BSVE-SVM-9Q3-007	090709	1319	AIR	AIR	QC	1	G	N	X				96
8																	
9																	
10																	
11																	
12																	

Relinquished by: Irail Gomez	Company: CH2M HILL	Received by: FedEx	Company:	Condition:		Custody Seals Intact:	
	Date/Time: 090809 1830		Date/Time:	Cooler Temp.:			
Relinquished by:	Company:	Received by:	Company:	Condition:		Custody Seals Intact:	
	Date/Time:		Date/Time:	Cooler Temp.:			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214899 Date Received 9.15.09 Number of coolers 1 Set
Client CH2MHill Project Honeywell Sly Harbor

Date Opened 9/16/09 By (print) J. Goode (sign)
Date Logged in 9/16/09 By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info FedEx 7915 0608 8173

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None Temp(°C) N/A

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are samples in the appropriate containers for indicated tests? _____ YES NO
11. Are sample labels present, in good condition and complete? _____ YES NO
12. Do the sample labels agree with custody papers? _____ YES NO
13. Was sufficient amount of sample sent for tests requested? _____ YES NO
14. Are the samples appropriately preserved? _____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 214899

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-1-M-9Q3	Diln Fac:	2.410
Lab ID:	214899-001	Batch#:	155123
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/21/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	1.3	1.2	6.4	6.0	D1
Vinyl Chloride	ND	1.2	ND	3.1	D1
Chloroethane	ND	1.2	ND	3.2	D1
Trichlorofluoromethane	ND	1.2	ND	6.8	D1
1,1-Dichloroethene	ND	1.2	ND	4.8	D1
Methylene Chloride	ND	1.2	ND	4.2	D1
Freon 113	ND	1.2	ND	9.2	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.8	D1
1,1-Dichloroethane	31	1.2	130	4.9	D1
MTBE	ND	1.2	ND	4.3	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.8	D1
n-Hexane	ND	1.2	ND	4.2	D1
Chloroform	2.3	1.2	11	5.9	D1
1,2-Dichloroethane	ND	1.2	ND	4.9	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.6	D1
Benzene	7.7	1.2	25	3.8	D1
Carbon Tetrachloride	ND	1.2	ND	7.6	D1
1,4-Dioxane	ND	1.2	ND	4.3	D1
Trichloroethene	2.4	1.2	13	6.5	D1
Toluene	ND	1.2	ND	4.5	D1
Tetrachloroethene	2.6	1.2	18	8.2	D1
Ethylbenzene	ND	1.2	ND	5.2	D1
m,p-Xylenes	ND	1.2	ND	5.2	D1
o-Xylene	ND	1.2	ND	5.2	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	5.9	D1
1,2,4-Trimethylbenzene	ND	1.2	ND	5.9	D1
1,4-Dichlorobenzene	ND	1.2	ND	7.2	D1
Xylene (total)	ND	2.4	ND	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-1-U-9Q3	Diln Fac:	2.380
Lab ID:	214899-002	Batch#:	155123
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.2	ND	5.9	D1
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.1	D1
Trichlorofluoromethane	ND	1.2	ND	6.7	D1
1,1-Dichloroethene	ND	1.2	ND	4.7	D1
Methylene Chloride	ND	1.2	ND	4.1	D1
Freon 113	ND	1.2	ND	9.1	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.7	D1
1,1-Dichloroethane	9.8	1.2	39	4.8	D1
MTBE	ND	1.2	ND	4.3	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.7	D1
n-Hexane	2.8	1.2	10	4.2	D1
Chloroform	ND	1.2	ND	5.8	D1
1,2-Dichloroethane	ND	1.2	ND	4.8	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.5	D1
Benzene	3.0	1.2	9.7	3.8	D1
Carbon Tetrachloride	ND	1.2	ND	7.5	D1
1,4-Dioxane	ND	1.2	ND	4.3	D1
Trichloroethene	ND	1.2	ND	6.4	D1
Toluene	ND	1.2	ND	4.5	D1
Tetrachloroethene	1.2	1.2	8.4	8.1	D1
Ethylbenzene	ND	1.2	ND	5.2	D1
m,p-Xylenes	1.3	1.2	5.5	5.2	D1
o-Xylene	ND	1.2	ND	5.2	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	5.8	D1
1,2,4-Trimethylbenzene	1.8	1.2	9.1	5.8	D1
1,4-Dichlorobenzene	ND	1.2	ND	7.2	D1
Xylene (total)	1.3	1.2	5.5	5.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-1-L-9Q3	Diln Fac:	166.8
Lab ID:	214899-003	Batch#:	155175
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	83	ND	410	D1
Vinyl Chloride	ND	83	ND	210	D1
Chloroethane	ND	83	ND	220	D1
Trichlorofluoromethane	ND	83	ND	470	D1
1,1-Dichloroethene	ND	83	ND	330	D1
Methylene Chloride	ND	83	ND	290	D1
Freon 113	ND	83	ND	640	D1
trans-1,2-Dichloroethene	ND	83	ND	330	D1
1,1-Dichloroethane	140	83	580	340	D1
MTBE	ND	83	ND	300	D1
cis-1,2-Dichloroethene	ND	83	ND	330	D1
n-Hexane	ND	83	ND	290	D1
Chloroform	ND	83	ND	410	D1
1,2-Dichloroethane	ND	83	ND	340	D1
1,1,1-Trichloroethane	ND	83	ND	460	D1
Benzene	ND	83	ND	270	D1
Carbon Tetrachloride	ND	83	ND	520	D1
1,4-Dioxane	ND	83	ND	300	D1
Trichloroethene	ND	83	ND	450	D1
Toluene	ND	83	ND	310	D1
Tetrachloroethene	ND	83	ND	570	D1
Ethylbenzene	130	83	560	360	D1
m,p-Xylenes	ND	83	ND	360	D1
o-Xylene	ND	83	ND	360	D1
1,3,5-Trimethylbenzene	ND	83	ND	410	D1
1,2,4-Trimethylbenzene	ND	83	ND	410	D1
1,4-Dichlorobenzene	ND	83	ND	500	D1
Xylene (total)	ND	170	ND	720	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-3-U-9Q3	Diln Fac:	4.860
Lab ID:	214899-004	Batch#:	155175
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	2.4	ND	12	D1
Vinyl Chloride	ND	2.4	ND	6.2	D1
Chloroethane	ND	2.4	ND	6.4	D1
Trichlorofluoromethane	ND	2.4	ND	14	D1
1,1-Dichloroethene	ND	2.4	ND	9.6	D1
Methylene Chloride	ND	2.4	ND	8.4	D1
Freon 113	ND	2.4	ND	19	D1
trans-1,2-Dichloroethene	ND	2.4	ND	9.6	D1
1,1-Dichloroethane	ND	2.4	ND	9.8	D1
MTBE	ND	2.4	ND	8.8	D1
cis-1,2-Dichloroethene	ND	2.4	ND	9.6	D1
n-Hexane	ND	2.4	ND	8.6	D1
Chloroform	8.6	2.4	42	12	D1
1,2-Dichloroethane	ND	2.4	ND	9.8	D1
1,1,1-Trichloroethane	ND	2.4	ND	13	D1
Benzene	ND	2.4	ND	7.8	D1
Carbon Tetrachloride	ND	2.4	ND	15	D1
1,4-Dioxane	ND	2.4	ND	8.8	D1
Trichloroethene	ND	2.4	ND	13	D1
Toluene	ND	2.4	ND	9.2	D1
Tetrachloroethene	ND	2.4	ND	16	D1
Ethylbenzene	ND	2.4	ND	11	D1
m,p-Xylenes	ND	2.4	ND	11	D1
o-Xylene	ND	2.4	ND	11	D1
1,3,5-Trimethylbenzene	ND	2.4	ND	12	D1
1,2,4-Trimethylbenzene	ND	2.4	ND	12	D1
1,4-Dichlorobenzene	ND	2.4	ND	15	D1
Xylene (total)	ND	4.9	ND	21	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-3-M-9Q3	Diln Fac:	2.200
Lab ID:	214899-005	Batch#:	155175
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.4	D1
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
Trichlorofluoromethane	1.6	1.1	8.9	6.2	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
Methylene Chloride	ND	1.1	ND	3.8	D1
Freon 113	ND	1.1	ND	8.4	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	12	1.1	57	5.4	D1
1,2-Dichloroethane	ND	1.1	ND	4.5	D1
1,1,1-Trichloroethane	1.8	1.1	10	6.0	D1
Benzene	29	1.1	93	3.5	D1
Carbon Tetrachloride	ND	1.1	ND	6.9	D1
1,4-Dioxane	ND	1.1	ND	4.0	D1
Trichloroethene	ND	1.1	ND	5.9	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	1.9	1.1	13	7.5	D1
Ethylbenzene	ND	1.1	ND	4.8	D1
m,p-Xylenes	ND	1.1	ND	4.8	D1
o-Xylene	ND	1.1	ND	4.8	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.4	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.4	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.6	D1
Xylene (total)	ND	2.2	ND	9.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-3-L-9Q3	Diln Fac:	2.280
Lab ID:	214899-006	Batch#:	155123
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.6	D1
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
Trichlorofluoromethane	6.5	1.1	36	6.4	D1
1,1-Dichloroethene	5.3	1.1	21	4.5	D1
Methylene Chloride	1.1	1.1	4.0	4.0	D1
Freon 113	6.6	1.1	50	8.7	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	3.3	1.1	14	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	1.3	1.1	4.7	4.0	D1
Chloroform	48	1.1	240	5.6	D1
1,2-Dichloroethane	ND	1.1	ND	4.6	D1
1,1,1-Trichloroethane	ND	1.1	ND	6.2	D1
Benzene	ND	1.1	ND	3.6	D1
Carbon Tetrachloride	ND	1.1	ND	7.2	D1
1,4-Dioxane	ND	1.1	ND	4.1	D1
Trichloroethene	12	1.1	62	6.1	D1
Toluene	ND	1.1	ND	4.3	D1
Tetrachloroethene	8.6	1.1	59	7.7	D1
Ethylbenzene	ND	1.1	ND	5.0	D1
m,p-Xylenes	ND	1.1	ND	5.0	D1
o-Xylene	ND	1.1	ND	5.0	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.6	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.6	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.9	D1
Xylene (total)	ND	2.3	ND	9.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-007	Diln Fac:	2.310
Lab ID:	214899-007	Batch#:	155175
Matrix:	Air	Sampled:	09/07/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	09/23/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.2	ND	5.7	D1
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.0	D1
Trichlorofluoromethane	6.3	1.2	35	6.5	D1
1,1-Dichloroethene	6.1	1.2	24	4.6	D1
Methylene Chloride	1.3	1.2	4.5	4.0	D1
Freon 113	7.1	1.2	55	8.9	D1
trans-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	3.8	1.2	15	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	1.8	1.2	6.2	4.1	D1
Chloroform	52	1.2	260	5.6	D1
1,2-Dichloroethane	ND	1.2	ND	4.7	D1
1,1,1-Trichloroethane	ND	1.2	ND	6.3	D1
Benzene	ND	1.2	ND	3.7	D1
Carbon Tetrachloride	ND	1.2	ND	7.3	D1
1,4-Dioxane	ND	1.2	ND	4.2	D1
Trichloroethene	12	1.2	67	6.2	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	10	1.2	68	7.8	D1
Ethylbenzene	ND	1.2	ND	5.0	D1
m,p-Xylenes	ND	1.2	ND	5.0	D1
o-Xylene	ND	1.2	ND	5.0	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	5.7	D1
1,2,4-Trimethylbenzene	1.5	1.2	7.4	5.7	D1
1,4-Dichlorobenzene	ND	1.2	ND	6.9	D1
Xylene (total)	ND	2.3	ND	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	92	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC512899	Diln Fac:	1.000
Matrix:	Air	Batch#:	155123
Units (V):	ppbv	Analyzed:	09/21/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155123
Units (V):	ppbv	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512900

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.222	92	70-130	
Vinyl Chloride	10.00	7.818	78	70-130	
Chloroethane	10.00	9.516	95	70-130	
Trichlorofluoromethane	10.00	8.725	87	70-130	
1,1-Dichloroethene	10.00	9.272	93	70-130	
Methylene Chloride	10.00	9.349	93	70-130	
Freon 113	10.00	9.397	94	70-130	
trans-1,2-Dichloroethene	10.00	10.26	103	70-130	
1,1-Dichloroethane	10.00	9.400	94	70-130	
MTBE	10.00	9.823	98	70-130	
cis-1,2-Dichloroethene	10.00	9.188	92	70-130	
n-Hexane	10.00	9.211	92	70-130	
Chloroform	10.00	9.449	94	70-130	
1,2-Dichloroethane	10.00	9.230	92	70-130	
1,1,1-Trichloroethane	10.00	9.176	92	70-130	
Benzene	10.00	9.287	93	70-130	
Carbon Tetrachloride	10.00	7.858	79	70-130	
1,4-Dioxane	10.00	8.154	82	70-130	
Trichloroethene	10.00	9.338	93	70-130	
Toluene	10.00	9.331	93	70-130	
Tetrachloroethene	10.00	9.635	96	70-130	
Ethylbenzene	10.00	9.520	95	70-130	
m,p-Xylenes	20.00	19.63	98	70-130	
o-Xylene	10.00	9.588	96	70-130	
1,3,5-Trimethylbenzene	10.00	9.630	96	70-130	
1,2,4-Trimethylbenzene	10.00	9.853	99	70-130	
1,4-Dichlorobenzene	10.00	9.421	94	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155123
Units (V):	ppbv	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512901

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.930	89	70-130	3	25	
Vinyl Chloride	10.00	8.713	87	70-130	11	25	
Chloroethane	10.00	9.153	92	70-130	4	25	
Trichlorofluoromethane	10.00	8.572	86	70-130	2	25	
1,1-Dichloroethene	10.00	9.131	91	70-130	2	25	
Methylene Chloride	10.00	9.104	91	70-130	3	25	
Freon 113	10.00	9.229	92	70-130	2	25	
trans-1,2-Dichloroethene	10.00	9.980	100	70-130	3	25	
1,1-Dichloroethane	10.00	9.535	95	70-130	1	25	
MTBE	10.00	9.718	97	70-130	1	25	
cis-1,2-Dichloroethene	10.00	8.808	88	70-130	4	25	
n-Hexane	10.00	9.363	94	70-130	2	25	
Chloroform	10.00	9.363	94	70-130	1	25	
1,2-Dichloroethane	10.00	9.192	92	70-130	0	25	
1,1,1-Trichloroethane	10.00	8.993	90	70-130	2	25	
Benzene	10.00	9.600	96	70-130	3	25	
Carbon Tetrachloride	10.00	7.762	78	70-130	1	25	
1,4-Dioxane	10.00	7.878	79	70-130	3	25	
Trichloroethene	10.00	9.064	91	70-130	3	25	
Toluene	10.00	9.377	94	70-130	0	25	
Tetrachloroethene	10.00	9.961	100	70-130	3	25	
Ethylbenzene	10.00	9.692	97	70-130	2	25	
m,p-Xylenes	20.00	19.61	98	70-130	0	25	
o-Xylene	10.00	9.713	97	70-130	1	25	
1,3,5-Trimethylbenzene	10.00	10.04	100	70-130	4	25	
1,2,4-Trimethylbenzene	10.00	9.832	98	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.477	95	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513102	Diln Fac:	1.000
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513103

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.154	92	70-130	
Vinyl Chloride	10.00	7.688	77	70-130	
Chloroethane	10.00	9.296	93	70-130	
Trichlorofluoromethane	10.00	8.596	86	70-130	
1,1-Dichloroethene	10.00	9.146	91	70-130	
Methylene Chloride	10.00	9.274	93	70-130	
Freon 113	10.00	9.295	93	70-130	
trans-1,2-Dichloroethene	10.00	9.991	100	70-130	
1,1-Dichloroethane	10.00	9.414	94	70-130	
MTBE	10.00	9.600	96	70-130	
cis-1,2-Dichloroethene	10.00	8.890	89	70-130	
n-Hexane	10.00	9.140	91	70-130	
Chloroform	10.00	9.299	93	70-130	
1,2-Dichloroethane	10.00	9.197	92	70-130	
1,1,1-Trichloroethane	10.00	9.142	91	70-130	
Benzene	10.00	9.089	91	70-130	
Carbon Tetrachloride	10.00	7.852	79	70-130	
1,4-Dioxane	10.00	8.072	81	70-130	
Trichloroethene	10.00	9.130	91	70-130	
Toluene	10.00	9.748	97	70-130	
Tetrachloroethene	10.00	10.03	100	70-130	
Ethylbenzene	10.00	9.957	100	70-130	
m,p-Xylenes	20.00	20.22	101	70-130	
o-Xylene	10.00	10.30	103	70-130	
1,3,5-Trimethylbenzene	10.00	9.996	100	70-130	
1,2,4-Trimethylbenzene	10.00	10.07	101	70-130	
1,4-Dichlorobenzene	10.00	9.529	95	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214899	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155175
Units (V):	ppbv	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513104

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	8.986	90	70-130	2	25	
Vinyl Chloride	10.00	8.741	87	70-130	13	25	
Chloroethane	10.00	9.328	93	70-130	0	25	
Trichlorofluoromethane	10.00	8.740	87	70-130	2	25	
1,1-Dichloroethene	10.00	9.227	92	70-130	1	25	
Methylene Chloride	10.00	9.343	93	70-130	1	25	
Freon 113	10.00	9.317	93	70-130	0	25	
trans-1,2-Dichloroethene	10.00	10.06	101	70-130	1	25	
1,1-Dichloroethane	10.00	9.379	94	70-130	0	25	
MTBE	10.00	9.603	96	70-130	0	25	
cis-1,2-Dichloroethene	10.00	8.817	88	70-130	1	25	
n-Hexane	10.00	9.296	93	70-130	2	25	
Chloroform	10.00	9.237	92	70-130	1	25	
1,2-Dichloroethane	10.00	9.135	91	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.049	90	70-130	1	25	
Benzene	10.00	9.285	93	70-130	2	25	
Carbon Tetrachloride	10.00	7.833	78	70-130	0	25	
1,4-Dioxane	10.00	8.392	84	70-130	4	25	
Trichloroethene	10.00	9.385	94	70-130	3	25	
Toluene	10.00	9.140	91	70-130	6	25	
Tetrachloroethene	10.00	9.632	96	70-130	4	25	
Ethylbenzene	10.00	9.797	98	70-130	2	25	
m,p-Xylenes	20.00	19.44	97	70-130	4	25	
o-Xylene	10.00	9.616	96	70-130	7	25	
1,3,5-Trimethylbenzene	10.00	9.542	95	70-130	5	25	
1,2,4-Trimethylbenzene	10.00	9.571	96	70-130	5	25	
1,4-Dichlorobenzene	10.00	9.238	92	70-130	3	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214899 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214899 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209380829001 File : 264_001 Time : 21-SEP-2009 11:09

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62344	11.01	
75	30% - 66% of mass 95	212663	37.54	
95		566446	100.00	
96	5% - 9% of mass 95	38425	6.78	
173	< 2% of mass 174	623	0.18	
174	50% - 120% of mass 95	337318	59.55	
175	4% - 9% of mass 174	21937	6.50	
176	93% - 101% of mass 174	315337	93.48	
177	5% - 9% of mass 176	20382	6.46	

CURTIS & TOMPKINS BFB TUNE FOR 214899 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209382479000 File : 265 Time : 22-SEP-2009 14:39

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	56201	10.95	
75	30% - 66% of mass 95	189443	36.93	
95		513040	100.00	
96	5% - 9% of mass 95	27004	5.26	
173	< 2% of mass 174	1181	0.43	
174	50% - 120% of mass 95	276278	53.85	
175	4% - 9% of mass 174	17407	6.30	
176	93% - 101% of mass 174	259608	93.97	
177	5% - 9% of mass 176	14307	5.51	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214899 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	**26**	33.33	5	50.00	-7	100.0	**-31**
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	**24**	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	**24**	5.000	-12	10.00	**-56**	16.67	**31**	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	**-39**	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	**-22**
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	**-25**
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	**-21**
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	**-22**	1.667	0	5.000	-12	10.00	-8	16.67	**23**	33.33	**30**				
Trichloroethene	0.167	**25**	0.500	1	1.667	**26**	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	**-21**	100.0	**-40**
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	**25**	0.500	3	1.667	**25**	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	**-28**
Ethylbenzene	0.167	**22**	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	**-31**
m,p-Xylenes	0.333	**26**	1.000	8	3.333	**22**	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	**-35**
o-Xylene	0.167	**31**	0.500	5	1.667	**25**	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	**-24**	100.0	**-33**
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	**22**	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	**-27**
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	**26**	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	**-30**
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214899 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214899 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC512900 IDF : 1.0
Seqnum : 1209380829002.3 File : 264_002 Time : 21-SEP-2009 12:19
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7470	10.00	9.222	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.6330	10.00	7.818	nL/L	-22	30	u
Chloroethane	0.0783	0.0745	10.00	9.516	nL/L	-5	30	u
Trichlorofluoromethane	3.8163	3.3289	10.00	8.725	nL/L	-13	30	u
1,1-Dichloroethene	1.1450	1.0614	10.00	9.272	nL/L	-7	30	u
Methylene Chloride	0.7638	0.7141	10.00	9.349	nL/L	-7	30	u
Freon 113	2.6173	2.4588	10.00	9.397	nL/L	-6	30	u
trans-1,2-Dichloroethene	1.7822	1.8285	10.00	10.26	nL/L	3	30	!v- u
1,1-Dichloroethane	2.2048	2.0720	10.00	9.400	nL/L	-6	30	u
MTBE	1.1668	1.1459	10.00	9.823	nL/L	-2	30	u
cis-1,2-Dichloroethene	2.0400	1.8738	10.00	9.188	nL/L	-8	30	u
n-Hexane	0.8500	0.7827	10.00	9.211	nL/L	-8	30	u
Chloroform	2.3937	2.2613	10.00	9.449	nL/L	-6	30	u
1,2-Dichloroethane	0.6592	0.6082	10.00	9.230	nL/L	-8	30	u
1,1,1-Trichloroethane	0.8700	0.7981	10.00	9.176	nL/L	-8	30	u
Benzene	0.4460	0.4141	10.00	9.287	nL/L	-7	30	u
Carbon Tetrachloride	1.0378	0.8153	10.00	7.858	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1159	10.00	8.154	nL/L	-18	30	!v- u
Trichloroethene	0.5119	0.4779	10.00	9.338	nL/L	-7	30	u
Toluene	1.5952	1.4879	10.00	9.331	nL/L	-7	30	u
Tetrachloroethene	0.5206	0.5015	10.00	9.635	nL/L	-4	30	u
Ethylbenzene	1.9165	1.8240	10.00	9.520	nL/L	-5	30	u
m,p-Xylenes	1.7645	1.7323	20.00	19.63	nL/L	-2	30	m u
o-Xylene	1.6441	1.5759	10.00	9.588	nL/L	-4	30	u
1,3,5-Trimethylbenzene	2.1384	2.0588	10.00	9.630	nL/L	-4	30	u
1,2,4-Trimethylbenzene	2.0458	2.0151	10.00	9.853	nL/L	-1	30	u
1,4-Dichlorobenzene	1.3357	1.2581	10.00	9.421	nL/L	-6	30	u
Bromofluorobenzene	0.7384	0.6991	10.00	9.468	nL/L	-5	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	932738	-19.55	27.15	27.18	0.03
1,4-Difluorobenzene	4209375	3345595	-20.52	31.87	31.91	0.04
Chlorobenzene-d5	3611816	2871756	-20.49	41.74	41.76	0.02

SJD 09/23/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214899 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC513103 IDF : 1.0
Seqnum : 1209382479002.2 File : 265_002 Time : 22-SEP-2009 15:40
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.7266	10.00	9.154	nL/L	-8	30	u
Vinyl Chloride	0.8099	0.6225	10.00	7.688	nL/L	-23	30	u
Chloroethane	0.0783	0.0728	10.00	9.296	nL/L	-7	30	u
Trichlorofluoromethane	3.8163	3.2795	10.00	8.596	nL/L	-14	30	u
1,1-Dichloroethene	1.1450	1.0470	10.00	9.146	nL/L	-9	30	u
Methylene Chloride	0.7638	0.7083	10.00	9.274	nL/L	-7	30	u
Freon 113	2.6173	2.4322	10.00	9.295	nL/L	-7	30	u
trans-1,2-Dichloroethene	1.7822	1.7801	10.00	9.991	nL/L	0	30	!v- u
1,1-Dichloroethane	2.2048	2.0750	10.00	9.414	nL/L	-6	30	u
MTBE	1.1668	1.1199	10.00	9.600	nL/L	-4	30	u
cis-1,2-Dichloroethene	2.0400	1.8131	10.00	8.890	nL/L	-11	30	u
n-Hexane	0.8500	0.7767	10.00	9.140	nL/L	-9	30	u
Chloroform	2.3937	2.2253	10.00	9.299	nL/L	-7	30	u
1,2-Dichloroethane	0.6592	0.6061	10.00	9.197	nL/L	-8	30	u
1,1,1-Trichloroethane	0.8700	0.7951	10.00	9.142	nL/L	-9	30	u
Benzene	0.4460	0.4052	10.00	9.089	nL/L	-9	30	u
Carbon Tetrachloride	1.0378	0.8146	10.00	7.852	nL/L	-21	30	u
1,4-Dioxane	0.1421	0.1147	10.00	8.072	nL/L	-19	30	!v- u
Trichloroethene	0.5119	0.4673	10.00	9.130	nL/L	-9	30	u
Toluene	1.5952	1.5546	10.00	9.748	nL/L	-3	30	u
Tetrachloroethene	0.5206	0.5221	10.00	10.03	nL/L	0	30	u
Ethylbenzene	1.9165	1.9076	10.00	9.957	nL/L	0	30	u
m,p-Xylenes	1.7645	1.7838	20.00	20.22	nL/L	1	30	u
o-Xylene	1.6441	1.6928	10.00	10.30	nL/L	3	30	u
1,3,5-Trimethylbenzene	2.1384	2.1370	10.00	9.996	nL/L	0	30	u
1,2,4-Trimethylbenzene	2.0458	2.0586	10.00	10.07	nL/L	1	30	u
1,4-Dichlorobenzene	1.3357	1.2725	10.00	9.529	nL/L	-5	30	u
Bromofluorobenzene	0.7384	0.7401	10.00	10.02	nL/L	0	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	943956	-18.59	27.15	27.20	0.05
1,4-Difluorobenzene	4209375	3311896	-21.32	31.87	31.93	0.06
Chlorobenzene-d5	3611816	2756429	-23.68	41.74	41.79	0.05

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209380829

Date : 09/21/09 Reference : 244_010
Sequence : MSAIR01 264 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC512900	932738	27.18	3345595	31.91	2871756	41.76
003	BSD	QC512901	933764	27.20	3328820	31.93	2822277	41.79
004	BLANK	QC512899	1005452	27.21	3464203	31.93	2905878	41.79
005	SAMPLE	214808-003	881208	27.21	3310551	31.94	2345224	41.80
006	SAMPLE	214808-004	910538	27.21	3367610	31.94	2175685	41.81
007	SAMPLE	214807-001	904253	27.22	3247637	31.94	2800303	41.79
008	SAMPLE	214807-002	926038	27.20	3277097	31.93	2738137	41.79
009	SAMPLE	214807-003	912602	27.20	3246454	31.92	2796645	41.78
010	SAMPLE	214807-004	879290	27.21	3170978	31.93	2755917	41.78
011	SAMPLE	214807-005	911177	27.17	3217346	31.90	2669065	41.75
012	SAMPLE	214807-006	885006	27.17	3174965	31.90	2714695	41.76
013	SAMPLE	214899-001	876278	27.17	3164293	31.90	2676891	41.76
014	SAMPLE	214899-002	887743	27.18	3169942	31.90	2639001	41.76
015	SAMPLE	214899-003	874618	27.17	3156037	31.90	1828943 *	41.76
016	SAMPLE	214899-004	888691	27.18	3184165	31.90	2651684	41.76
017	SAMPLE	214899-005	841905	27.21	3092999	31.94	2647404	41.79
018	SAMPLE	214899-006	909449	27.20	3282816	31.93	2734653	41.79
019	SAMPLE	214807-001	964887	27.21	3343554	31.93	2748075	41.77
020	SAMPLE	214807-002	949610	27.19	3384872	31.91	2797016	41.76

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209382479

Date : 09/22/09 Reference : 244_010
Sequence : MSAIR01 265 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	CCV/BS	QC513103	943956	27.20	3311896	31.93	2756429	41.79
003	BSD	QC513104	924167	27.21	3295521	31.94	2855772	41.79
004	BLANK	QC513102	1003723	27.22	3444296	31.95	2924866	41.80
005	SAMPLE	214891-001	940919	27.21	3330703	31.93	2606753	41.79
006	SAMPLE	214891-002	920147	27.21	3267245	31.93	2633514	41.79
007	SAMPLE	214891-003	903193	27.20	3286715	31.93	2540701	41.79
008	SAMPLE	214891-004	921055	27.20	3293360	31.93	2644912	41.79
009	SAMPLE	214807-003	905651	27.20	3263847	31.93	2660513	41.79
010	SAMPLE	214807-004	874028	27.21	3159009	31.94	2610001	41.79
011	SAMPLE	214807-005	904227	27.20	3246812	31.93	2662399	41.79
012	SAMPLE	214807-006	892185	27.19	3237166	31.93	2643657	41.79
013	SAMPLE	214891-005	916097	27.19	3267000	31.93	2659000	41.79
014	SAMPLE	214891-006	889892	27.20	3194412	31.93	2551530	41.79
015	SAMPLE	214899-003	897082	27.21	3138000	31.94	2329000	41.80
016	SAMPLE	214899-004	926920	27.21	3321995	31.93	2591247	41.77
017	SAMPLE	214899-005	908553	27.17	3297768	31.90	2586341	41.76
018	SAMPLE	214899-007	889618	27.18	3250357	31.91	2550104	41.77
019	SAMPLE	214899-007	839014	27.18	3017228	31.91	2363625	41.77
020	SAMPLE	214891-001	896858	27.19	3186145	31.91	2515265	41.77

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209380829

Instrument : MSAIR01 Begun : 09/21/09 11:09
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264_001	TUN	BFB			09/21/09 11:09	1.0	1	
002	264_002	CCV/BS	QC512900	Air	155123	09/21/09 12:19	1.0	2 1	
003	264_003	BSD	QC512901	Air	155123	09/21/09 13:19	1.0	2 1	
004	264_004	BLANK	QC512899	Air	155123	09/21/09 14:19	1.0	1	
005	264_005	SAMPLE	214808-003	Air	155123	09/21/09 15:19	80.40	1	4:CYHEXANE=350
006	264_006	SAMPLE	214808-004	Air	155123	09/21/09 16:19	79.60	1	4:CYHEXANE=350
007	264_007	SAMPLE	214807-001	Air	155123	09/21/09 17:19	4.96	1	
008	264_008	SAMPLE	214807-002	Air	155123	09/21/09 18:19	6.06	1	
009	264_009	SAMPLE	214807-003	Air	155123	09/21/09 19:19	36.48	1	
010	264_010	SAMPLE	214807-004	Air	155123	09/21/09 20:20	46.80	1	
011	264_011	SAMPLE	214807-005	Air	155123	09/21/09 21:19	5.28	1	
012	264_012	SAMPLE	214807-006	Air	155123	09/21/09 22:18	12.66	1	
013	264_013	SAMPLE	214899-001	Air	155123	09/21/09 23:20	2.41	1	
014	264_014	SAMPLE	214899-002	Air	155123	09/22/09 00:20	2.38	1	
015	264_015	SAMPLE	214899-003	Air	155123	09/22/09 01:20	16.68	1	1:CDS=140
016	264_016	SAMPLE	214899-004	Air	155123	09/22/09 02:21	7.29	1	
017	264_017	SAMPLE	214899-005	Air	155123	09/22/09 03:21	4.400	1	
018	264_018	SAMPLE	214899-006	Air	155123	09/22/09 04:21	2.28	1	
019	264_019	SAMPLE	214807-001	Air	155123	09/22/09 05:21	2.48	1	
020	264_020	SAMPLE	214807-002	Air	155123	09/22/09 06:21	3.03	1	

SJD 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BO 09/24/09 : Matrix spikes were not performed for this analysis in batch 155123 because they are not required by the method.

Analyst: SJD Date: 09/24/09 Reviewer: BO Date: 09/24/09

Standards used: 1=S12824 2=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209382479

Instrument : MSAIR01 Begun : 09/22/09 14:39
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	265	TUN	BFB			09/22/09 14:39	1.0	1	
002	265_002	CCV/BS	QC513103	Air	155175	09/22/09 15:40	1.0	2 1	
003	265_003	BSD	QC513104	Air	155175	09/22/09 16:40	1.0	2 1	
004	265_004	BLANK	QC513102	Air	155175	09/22/09 17:41	1.0	1	
005	265_005	SAMPLE	214891-001	Air	155175	09/22/09 18:41	3.03	1	1:PCE=100
006	265_006	SAMPLE	214891-002	Air	155175	09/22/09 19:42	2.08	1	1:PCE=210
007	265_007	SAMPLE	214891-003	Air	155175	09/22/09 20:42	2.16	1	
008	265_008	SAMPLE	214891-004	Air	155175	09/22/09 21:42	2.11	1	
009	265_009	SAMPLE	214807-003	Air	155175	09/22/09 22:42	3.04	1	
010	265_010	SAMPLE	214807-004	Air	155175	09/22/09 23:43	2.34	1	
011	265_011	SAMPLE	214807-005	Air	155175	09/23/09 00:42	2.64	1	
012	265_012	SAMPLE	214807-006	Air	155175	09/23/09 01:43	2.11	1	
013	265_013	SAMPLE	214891-005	Air	155175	09/23/09 02:43	2.04	1	1:TCE=130
014	265_014	SAMPLE	214891-006	Air	155175	09/23/09 03:43	2.04	1	
015	265_015	SAMPLE	214899-003	Air	155175	09/23/09 04:43	166.8	1	
016	265_016	SAMPLE	214899-004	Air	155175	09/23/09 05:43	4.86	1	
017	265_017	SAMPLE	214899-005	Air	155175	09/23/09 06:42	2.200	1	
018	265_018	SAMPLE	214899-007	Air	155175	09/23/09 07:42	13.86	1	
019	265_019	SAMPLE	214899-007	Air	155175	09/23/09 13:13	2.31	1	
020	265_020	SAMPLE	214891-001	Air	155175	09/23/09 14:13	9.09	1	

SJD 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BO 09/24/09 : Matrix spikes were not performed for this analysis in batch 155175 because they are not required by the method.

Analyst: SJD Date: 09/24/09 Reviewer: BO Date: 09/24/09

Standards used: 1=S12824 2=S12815

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PROJECT _____

Continued From Page _____

prep date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
App 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.13	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
App 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
Sto 9/16/09	BLANK	C1705	~~1x~~	~~1~~	1.0x	
App 9/18/09	214752-010	C00170	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00154	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00060	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00184	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank	C1703	—	—	1.0x	
App 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

PROJECT

Notebook No.

Continued From Page

Prepared by Date	SAMPLE ID	PANID	Initial (psig) pressure	Final (psig) pressure	Dilution factor	Comments
9/21 AM	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	16.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.82	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00031	1.5 added	30.00	40.2x	20x of 2.01x C00022
	004	C00031	1	30.00	39.8x	20x of C00107 1.99x
9/22/09 AM	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1703	—	—	1x	
9/23/09 AM	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Signed Date Signed Date

PROJECT

Notebook No.

Continued From Page

Performed by / Date	Sample ID	Can ID	Initial (psig) pressure	Final (psig) pressure	Dilution factor	Comments
9/21 AM	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.52	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00042
	004	C00031	1	30.00	39.8x	20x of C00109 2.99x 1.99x
9/22 AM	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1702	—	—	1x	
9/23 AM	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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PROJECT _____

Continued From Page _____

Prepared by / Date	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Factor	Comments
APP 9/16/09	214752-001	C00116	10.47	22.64	2.16x	
	002	C00138	7.79	22.00	2.82x	
	003	C00080	9.91	22.85	2.31x	
	004	C00185	11.06	22.47	2.03x	
	005	C00151	6.43	22.70	3.53x	
	006	C00187	7.91	22.33	2.82x	
	007	C00167	10.11	23.05	2.28x	
	008	C00162	8.22	22.41	2.73x	
APP 9/16/09	214752-009	C00163	9.40	25.22	2.68x	
STD 9/16/09	BLANK	C1205	1x 53	1 500	1.0x	
APP 9/18/09	214752-010	C00070	11.61	22.75	1.96x	
	011	C00146	11.68	22.75	1.95x	
	012	C00114	10.52	23.34	2.22x	
	013	C00184	8.07	22.53	2.79x	
	014	C00192	11.54	23.29	2.02x	
	015	C00129	11.61	22.70	1.96x	
	016	C00190	11.78	22.91	1.94x	
	017	C00168	11.60	23.35	2.01x	
	018	C00081	11.65	23.55	2.02x	
	019	C00160	11.86	22.45	1.89x	
	020	C00098	11.67	23.08	1.98x	
	021	C00131	11.98	22.53	1.88x	
	022	C00069	12.10	24.25	2.00x	
	214808-001	C00180	12.23	22.72	1.86x	
	002	C00184	11.25	23.15	2.06x	
	003	C00063	11.39	22.92	2.01x	
	004	C00109	11.38	22.61	1.99x	
	Blank	C1708	—	—	1.0x	
APP 9/21	214807-001	C00178	9.49	23.53	2.48x	
	002	C00125	7.49	22.67	3.03x	
	003	C00145	7.27	22.11	3.04x	
	004	C00130	9.54	22.37	2.34x	
	005	C00104	9.44	24.90	2.64x	
	006	C00158	10.50	22.12	2.11x	

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Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214904
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
SMW-2-M-9Q3	214904-001
P-32-9Q3	214904-002
BSVE-INLET-9Q3	214904-003
SMW-4-L-9Q3	214904-004
SMW-4-M-9Q3	214904-005
SMW-4-U-9Q3	214904-006
BV-3N-9Q3	214904-007
BV-19N-9Q3	214904-008
BSVE-SVM-9Q3-008	214904-009
BV-1N-9Q3	214904-010
BV-10N-9Q3	214904-011
ASE-46A-9Q3	214904-012
BV-9N-9Q3	214904-013
BV-13N-9Q3	214904-014

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/13/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214904**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/15/09**
Samples Received:	**09/15/09**

This data package contains sample and QC results for fourteen air samples, requested for the above referenced project on 09/15/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
SMW-4-L-9Q3 (lab # 214904-004) and BSVE-SVM-9Q3-008 (lab # 214904-009) were diluted due to problematic matrix.

No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):
No analytical problems were encountered.

Chain of Custody

~~219~~ 214904

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	39979.57265
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase: BSVE QTR SVM
Location of Site: Phoenix, AZ
Sampling Program: ~~BSVE AIR Permit~~

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: B. Foehn
PO # ~~4000342~~ 5101516
Analysis Turnaround Time (TAT): 10 Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

Preservative

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	TO-15 (Benzene, Vinyl Chloride) VOC5	TO-3 Methane TO-15 (Benzene) TPH	ASTM D946 TO-15 (Vinyl Chloride) O2 & CO2	TO-15 (Total VOCs)	Sampling Method (code)	Canister Serial No.
											Units							
1	SMW-2-M	20	25	SMW-2-M-9Q3	9/13/09	0925	AIR	AIR	REG	1	G	N	X	X				142
2	P-32	5.5	6	P-32-9Q3	9/13/09	1038	AIR	AIR	REG	1	G	N		X				126
3	BSVE-Inlet	–	–	BSVE-Inlet-9Q3	9/13/09	1150	AIR	AIR	REG	1	G	N		X	X			75
4	SMW-4-L	55	–	SMW-4-L-9Q3	9/12/09	1252	AIR	AIR	REG	1	G	N	X	X				176
5	SMW-4-M	20	25	SMW-4-M-9Q3	9/12/09	1159	AIR	AIR	REG	1	G	N	X	X	X	X		193
6	SMW-4-U	5	9	SMW-4-U-9Q3	9/12/09	1129	AIR	AIR	REG	1	G	N	X	X				132
7	BV-3N	55	–	BV-3N-9Q3	9/12/09	1008	AIR	AIR	REG	1	G	N		X	X			128
8	BV-19N	55	–	BV-19N-9Q3	9/11/09	1907	AIR	AIR	REG	1	G	N		X	X			78
9	Field QC	~~55~~	—	BSVE-SVM-9Q3-008	9/12/09	1252	AIR	AIR	QC	1	G	N	X	X			Chp only	160
10	BV-1N	55	—	BV-1N-9Q3	9/11/09	1536	AIR	AIR	REG	1	G	N		X	X			113
11	BV-10N	55	—	BV-10N-9Q3	9/11/09	1612	AIR	AIR	REG	1	G	N		X	X			161
12	ASE-464	54.7	—	ASE-464-9Q3	9/11/09	1103	AIR	AIR	REG	1	G	N		X	X			72

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Brian Foehn	CH2M Hill	FedEx			
Date/Time: 9/13/09 1700		Date/Time:		Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
			C.T.		
Date/Time			Date/Time: 9.16.09 0930	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214904

p. 2 of 2

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	39979.57265		
COC#	37380_		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase: BSVE QTR SYM
Location of Site: Phoenix, AZ
Sampling Program: ~~BSVE AIR Permit~~

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: B. Fochs
PO # ~~4990342~~ 5101516
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	TO-15 (Benzene, Vinyl Chloride)	~~TO-15 (Benzene)~~ TO-3 Methane + TPH	~~TO-15 (Vinyl Chloride)~~ ASTM 1946 O2 & CO2	~~TO-15 (Total VOCs)~~	Sampling Method (code)	Canister Serial No.
											Units							
13 1	BV-9N	55	–	BV-9N-9Q3	~~AIR~~ ~~AIR~~	~~AIR~~	AIR	AIR	REG	1	G	N		x	x			107
2					9/11/09	1005												
14 3	BV-13N	55	–	BV-13N-9Q3	9/11/09	1244	AIR	AIR	REG	1	G	N		x	x			95
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Brian Fochs	CH2MHill	FedEx			
	Date/Time 9/13/09 1100		Date/Time	Cooler Temp.	
Relinquished by	Company	Received by	Company CIT	Condition	Custody Seals Intact
	Date/Time		Date/Time 9-16-09 0930	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214904

p. 1 of 2

Amended 9-16-2009

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 39979.57285
COC#: 37380

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase: BSVE QTR SYM
Location of Site: Phoenix, AZ
Sampling Program: ~~BSVE AIR Permit~~
Lab Proj # (SDG):
Lab ID: CTBERK
Site ID: SKYHARBOR
Lab Job #:
Authorized User: Honeywell

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer peterson@ch2m.com
Sampler: B. Fach
PO #: ~~4000012~~ 510515le
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To:
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

Text & Excel File Drive: Excel & Text File Order

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	Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	TO-15 (Benzene, Vinyl Chloride)	TO-3 Methane + TPH	ASTM D1946 O2 & CO2	TO-15 (Total VOCs)	Sampling Method (code)	Canister Serial No.
											Units							
1	SMW-2-M	20	25	SMW-2-M-9Q3	9/13/09	0925	AIR	AIR	REG	1	G	N	X	X				142
2	P-32	5.5	6	P-32-9Q3	9/13/09	1038	AIR	AIR	REG	1	G	N		X				126
3	BSVE-Inlet	–	–	BSVE-Inlet-9Q3	9/13/09	1150	AIR	AIR	REG	1	G	N		X	X			75
4	SMW-4-L	55	–	SMW-4-L-9Q3	9/12/09	1252	AIR	AIR	REG	1	G	N	X	X				176
5	SMW-4-M	20	25	SMW-4-M-9Q3	9/12/09	1159	AIR	AIR	REG	1	G	N	X	X				193
6	SMW-4-U	5	9	SMW-4-U-9Q3	9/12/09	1129	AIR	AIR	REG	1	G	N	X	X				132
7	BV-3N	55	–	BV-3N-9Q3	9/12/09	1008	AIR	AIR	REG	1	G	N		X	X			128
8	BV-19N	55	–	BV-19N-9Q3	9/11/09	1907	AIR	AIR	REG	1	G	N		X	X			78
9	Field QC	55	—	BSVE-SVM-9Q3003	9/12/09	1252	AIR	AIR	QC	1	G	N	X	X				160
10	BV-1N	55	–	BV-1N-9Q3	9/11/09	1536	AIR	AIR	REG	1	G	N		X	X			113
11	BV-10N	55	–	BV-10N-9Q3	9/11/09	1612	AIR	AIR	REG	1	G	N		X	X			161
12	MSE-46M	54.7	—	MSE-46M-9Q3	9/11/09	1103	AIR	AIR	REG	1	G	N		X	X			72

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
Brian Fach	CH2M Hill	9/13/09 1700	FedEx					
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214904

p. 2 of 2

Amended 9-16-2009

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	30879.57286
COC#	37380_
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase: BSVE QTR SYM
Location of Site: Phoenix, AZ
Sampling Program: ~~BSVE AIR Permit~~

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Client Contact: (name, co., address)
Sampler: B. Fach
PO #: ~~4000612~~ 5101516
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Analysis Turnaround Time (TAT): 10
Consultant
Preliminary Data To: Jennifer Peterson, CH2M Hill
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Full Report TAT: 10
Invoice To: Honeywell/Copy to J. Peterson

Preservative

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	TO-15 (Benzene, Vinyl-Chloride) VOC's	TO-15 (Benzene) TPH-3	Methane ASTM 1946	TPH	O2	TO-15 (Total VOCs)	Sampling Method (code)	Canister Serial No.
											Units									
13 1	BV-9N	55	–	BV-9N-9Q3	~~AIR~~	~~AIR~~	AIR	AIR	REG	1	G	N		X	X					107
2					9/11/09	1005														
14 3	BV-13N	55	–	BV-13N-9Q3	9/11/09	1244	AIR	AIR	REG	1	G	N		X	X					95
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

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Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Brian Fach	CH2M Hill	FedEx	Date/Time	Cooler Temp.	
	Date/Time 9/13/09 1100				
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214904 Date Received 9-16-09 Number of coolers 1 box
Client CH2MHILL Project Honeywell Air

Date Opened 9-16-09 By (print) J. Grayette (sign)
Date Logged in _____ By (print) _____ (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info FedEx 7921 6154 8080

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None Temp(°C) N/A

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are samples in the appropriate containers for indicated tests? _____ YES NO
11. Are sample labels present, in good condition and complete? _____ YES NO
12. Do the sample labels agree with custody papers? _____ YES NO
13. Was sufficient amount of sample sent for tests requested? _____ YES NO
14. Are the samples appropriately preserved? _____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Laboratory Job Number 214904

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-2-M-9Q3	Units (M):	ug/m3
Lab ID:	214904-001	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.6	ND	7.7	3.110	155339	09/26/09	D2
Vinyl Chloride	ND	1.6	ND	4.0	3.110	155339	09/26/09	D2
Chloroethane	ND	1.6	ND	4.1	3.110	155339	09/26/09	D2
Trichlorofluoromethane	ND	1.6	ND	8.7	3.110	155339	09/26/09	D2
1,1-Dichloroethene	ND	1.6	ND	6.2	3.110	155339	09/26/09	D2
Methylene Chloride	ND	1.6	ND	5.4	3.110	155339	09/26/09	D2
Freon 113	16	1.6	120	12	3.110	155339	09/26/09	D2
trans-1,2-Dichloroethene	ND	1.6	ND	6.2	3.110	155339	09/26/09	D2
1,1-Dichloroethane	360	4.7	1,400	19	9.330	155742	10/07/09	D1
MTBE	ND	1.6	ND	5.6	3.110	155339	09/26/09	D2
cis-1,2-Dichloroethene	ND	1.6	ND	6.2	3.110	155339	09/26/09	D2
n-Hexane	ND	1.6	ND	5.5	3.110	155339	09/26/09	D2
Chloroform	3.8	1.6	18	7.6	3.110	155339	09/26/09	D2
1,2-Dichloroethane	ND	1.6	ND	6.3	3.110	155339	09/26/09	D2
1,1,1-Trichloroethane	ND	1.6	ND	8.5	3.110	155339	09/26/09	D2
Benzene	ND	1.6	ND	5.0	3.110	155339	09/26/09	D2
Carbon Tetrachloride	ND	1.6	ND	9.8	3.110	155339	09/26/09	D2
1,4-Dioxane	ND	1.6	ND	5.6	3.110	155339	09/26/09	D2
Trichloroethene	4.0	1.6	22	8.4	3.110	155339	09/26/09	D2
Toluene	ND	1.6	ND	5.9	3.110	155339	09/26/09	D2
Tetrachloroethene	2.9	1.6	20	11	3.110	155339	09/26/09	D2
Ethylbenzene	4.3	1.6	19	6.8	3.110	155339	09/26/09	D2
m,p-Xylenes	5.3	1.6	23	6.8	3.110	155339	09/26/09	D2
o-Xylene	ND	1.6	ND	6.8	3.110	155339	09/26/09	D2
1,3,5-Trimethylbenzene	6.4	1.6	32	7.6	3.110	155339	09/26/09	D2
1,2,4-Trimethylbenzene	28	1.6	140	7.6	3.110	155339	09/26/09	D2
1,4-Dichlorobenzene	ND	1.6	ND	9.3	3.110	155339	09/26/09	D2
Xylene (total)	5.3	3.1	23	14	3.110	155339	09/26/09	D2

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Bromofluorobenzene	106	70-130	3.110	155339	09/26/09	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-4-L-9Q3	Diln Fac:	26.52
Lab ID:	214904-004	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/06/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	13	ND	66	D1
Vinyl Chloride	36	13	91	34	D1
Chloroethane	15	13	40	35	D1
Trichlorofluoromethane	ND	13	ND	74	D1
1,1-Dichloroethene	82	13	330	53	D1
Methylene Chloride	ND	13	ND	46	D1
Freon 113	610	13	4,700	100	D1
trans-1,2-Dichloroethene	ND	13	ND	53	D1
1,1-Dichloroethane	670	13	2,700	54	D1
MTBE	ND	13	ND	48	D1
cis-1,2-Dichloroethene	ND	13	ND	53	D1
n-Hexane	ND	13	ND	47	D1
Chloroform	ND	13	ND	65	D1
1,2-Dichloroethane	ND	13	ND	54	D1
1,1,1-Trichloroethane	ND	13	ND	72	D1
Benzene	ND	13	ND	42	D1
Carbon Tetrachloride	ND	13	ND	83	D1
1,4-Dioxane	ND	13	ND	48	D1
Trichloroethene	220	13	1,200	71	D1
Toluene	ND	13	ND	50	D1
Tetrachloroethene	22	13	150	90	D1
Ethylbenzene	25	13	110	58	D1
m,p-Xylenes	ND	13	ND	58	D1
o-Xylene	ND	13	ND	58	D1
1,3,5-Trimethylbenzene	29	13	140	65	D1
1,2,4-Trimethylbenzene	150	13	730	65	D1
1,4-Dichlorobenzene	ND	13	ND	80	D1
Xylene (total)	ND	27	ND	120	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-4-M-9Q3	Batch#:	155742
Lab ID:	214904-005	Sampled:	09/12/09
Matrix:	Air	Received:	09/15/09
Units (V):	ppbv	Analyzed:	10/07/09
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Freon 12	ND	6.9	ND	34	13.80	D2
Vinyl Chloride	ND	6.9	ND	18	13.80	D2
Chloroethane	ND	6.9	ND	18	13.80	D2
Trichlorofluoromethane	ND	6.9	ND	39	13.80	D2
1,1-Dichloroethene	ND	6.9	ND	27	13.80	D2
Methylene Chloride	ND	6.9	ND	24	13.80	D2
Freon 113	290	6.9	2,200	53	13.80	D2
trans-1,2-Dichloroethene	ND	6.9	ND	27	13.80	D2
1,1-Dichloroethane	36	6.9	150	28	13.80	D2
MTBE	ND	6.9	ND	25	13.80	D2
cis-1,2-Dichloroethene	ND	6.9	ND	27	13.80	D2
n-Hexane	ND	6.9	ND	24	13.80	D2
Chloroform	9.1	6.9	45	34	13.80	D2
1,2-Dichloroethane	ND	6.9	ND	28	13.80	D2
1,1,1-Trichloroethane	ND	6.9	ND	38	13.80	D2
Benzene	ND	6.9	ND	22	13.80	D2
Carbon Tetrachloride	ND	6.9	ND	43	13.80	D2
1,4-Dioxane	ND	6.9	ND	25	13.80	D2
Trichloroethene	1,000	14	5,500	74	27.60	D2
Toluene	ND	6.9	ND	26	13.80	D2
Tetrachloroethene	11	6.9	73	47	13.80	D2
Ethylbenzene	10	6.9	45	30	13.80	D2
m,p-Xylenes	13	6.9	56	30	13.80	D2
o-Xylene	ND	6.9	ND	30	13.80	D2
1,3,5-Trimethylbenzene	15	6.9	72	34	13.80	D2
1,2,4-Trimethylbenzene	78	6.9	390	34	13.80	D2
1,4-Dichlorobenzene	ND	6.9	ND	41	13.80	D2
Xylene (total)	13	6.9	56	30	13.80	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	104	70-130	13.80	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	SMW-4-U-9Q3	Diln Fac:	13.14
Lab ID:	214904-006	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	6.6	ND	32	D2
Vinyl Chloride	ND	6.6	ND	17	D2
Chloroethane	ND	6.6	ND	17	D2
Trichlorofluoromethane	ND	6.6	ND	37	D2
1,1-Dichloroethene	ND	6.6	ND	26	D2
Methylene Chloride	ND	6.6	ND	23	D2
Freon 113	240	6.6	1,800	50	D2
trans-1,2-Dichloroethene	ND	6.6	ND	26	D2
1,1-Dichloroethane	11	6.6	44	27	D2
MTBE	ND	6.6	ND	24	D2
cis-1,2-Dichloroethene	ND	6.6	ND	26	D2
n-Hexane	ND	6.6	ND	23	D2
Chloroform	ND	6.6	ND	32	D2
1,2-Dichloroethane	ND	6.6	ND	27	D2
1,1,1-Trichloroethane	ND	6.6	ND	36	D2
Benzene	ND	6.6	ND	21	D2
Carbon Tetrachloride	ND	6.6	ND	41	D2
1,4-Dioxane	ND	6.6	ND	24	D2
Trichloroethene	510	6.6	2,700	35	D2
Toluene	ND	6.6	ND	25	D2
Tetrachloroethene	14	6.6	93	45	D2
Ethylbenzene	15	6.6	67	29	D2
m,p-Xylenes	20	6.6	88	29	D2
o-Xylene	ND	6.6	ND	29	D2
1,3,5-Trimethylbenzene	22	6.6	110	32	D2
1,2,4-Trimethylbenzene	110	6.6	560	32	D2
1,4-Dichlorobenzene	ND	6.6	ND	40	D2
Xylene (total)	20	13	88	57	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-008	Diln Fac:	26.64
Lab ID:	214904-009	Batch#:	155742
Matrix:	Air	Sampled:	09/12/09
Units (V):	ppbv	Received:	09/15/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	13	ND	66	D1
Vinyl Chloride	41	13	110	34	D1
Chloroethane	17	13	46	35	D1
Trichlorofluoromethane	ND	13	ND	75	D1
1,1-Dichloroethene	80	13	320	53	D1
Methylene Chloride	ND	13	ND	46	D1
Freon 113	590	13	4,600	100	D1
trans-1,2-Dichloroethene	ND	13	ND	53	D1
1,1-Dichloroethane	670	13	2,700	54	D1
MTBE	ND	13	ND	48	D1
cis-1,2-Dichloroethene	ND	13	ND	53	D1
n-Hexane	ND	13	ND	47	D1
Chloroform	ND	13	ND	65	D1
1,2-Dichloroethane	ND	13	ND	54	D1
1,1,1-Trichloroethane	ND	13	ND	73	D1
Benzene	ND	13	ND	43	D1
Carbon Tetrachloride	ND	13	ND	84	D1
1,4-Dioxane	ND	13	ND	48	D1
Trichloroethene	220	13	1,200	72	D1
Toluene	ND	13	ND	50	D1
Tetrachloroethene	20	13	140	90	D1
Ethylbenzene	17	13	72	58	D1
m,p-Xylenes	ND	13	ND	58	D1
o-Xylene	ND	13	ND	58	D1
1,3,5-Trimethylbenzene	21	13	100	65	D1
1,2,4-Trimethylbenzene	120	13	610	65	D1
1,4-Dichlorobenzene	ND	13	ND	80	D1
Xylene (total)	ND	27	ND	120	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	92	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513777	Diln Fac:	1.000
Matrix:	Air	Batch#:	155339
Units (V):	ppbv	Analyzed:	09/26/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	92	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155339
Units (V):	ppbv	Analyzed:	09/26/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513778

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	10.04	100	70-130	
Vinyl Chloride	10.00	9.700	97	70-130	
Chloroethane	10.00	10.27	103	70-130	
Trichlorofluoromethane	10.00	9.659	97	70-130	
1,1-Dichloroethene	10.00	10.53	105	70-130	
Methylene Chloride	10.00	9.672	97	70-130	
Freon 113	10.00	10.70	107	70-130	
trans-1,2-Dichloroethene	10.00	11.08	111	70-130	
1,1-Dichloroethane	10.00	10.30	103	70-130	
MTBE	10.00	10.48	105	70-130	
cis-1,2-Dichloroethene	10.00	9.821	98	70-130	
n-Hexane	10.00	10.23	102	70-130	
Chloroform	10.00	10.33	103	70-130	
1,2-Dichloroethane	10.00	10.27	103	70-130	
1,1,1-Trichloroethane	10.00	10.12	101	70-130	
Benzene	10.00	10.25	103	70-130	
Carbon Tetrachloride	10.00	8.341	83	70-130	
1,4-Dioxane	10.00	9.428	94	70-130	
Trichloroethene	10.00	9.945	99	70-130	
Toluene	10.00	11.32	113	70-130	
Tetrachloroethene	10.00	11.69	117	70-130	
Ethylbenzene	10.00	11.72	117	70-130	
m,p-Xylenes	20.00	23.86	119	70-130	
o-Xylene	10.00	11.83	118	70-130	
1,3,5-Trimethylbenzene	10.00	11.75	117	70-130	
1,2,4-Trimethylbenzene	10.00	11.98	120	70-130	
1,4-Dichlorobenzene	10.00	11.34	113	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155339
Units (V):	ppbv	Analyzed:	09/26/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513779

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	10.53	105	70-130	5	25	
Vinyl Chloride	10.00	10.22	102	70-130	5	25	
Chloroethane	10.00	11.04	110	70-130	7	25	
Trichlorofluoromethane	10.00	10.22	102	70-130	6	25	
1,1-Dichloroethene	10.00	10.95	110	70-130	4	25	
Methylene Chloride	10.00	11.55	116	70-130	18	25	
Freon 113	10.00	11.21	112	70-130	5	25	
trans-1,2-Dichloroethene	10.00	11.76	118	70-130	6	25	
1,1-Dichloroethane	10.00	10.93	109	70-130	6	25	
MTBE	10.00	11.45	114	70-130	9	25	
cis-1,2-Dichloroethene	10.00	10.32	103	70-130	5	25	
n-Hexane	10.00	10.80	108	70-130	5	25	
Chloroform	10.00	10.64	106	70-130	3	25	
1,2-Dichloroethane	10.00	10.32	103	70-130	1	25	
1,1,1-Trichloroethane	10.00	10.41	104	70-130	3	25	
Benzene	10.00	10.58	106	70-130	3	25	
Carbon Tetrachloride	10.00	8.664	87	70-130	4	25	
1,4-Dioxane	10.00	9.735	97	70-130	3	25	
Trichloroethene	10.00	10.34	103	70-130	4	25	
Toluene	10.00	11.02	110	70-130	3	25	
Tetrachloroethene	10.00	11.35	114	70-130	3	25	
Ethylbenzene	10.00	11.52	115	70-130	2	25	
m,p-Xylenes	20.00	23.46	117	70-130	2	25	
o-Xylene	10.00	11.77	118	70-130	0	25	
1,3,5-Trimethylbenzene	10.00	11.74	117	70-130	0	25	
1,2,4-Trimethylbenzene	10.00	11.80	118	70-130	2	25	
1,4-Dichlorobenzene	10.00	11.38	114	70-130	0	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC513832	Diln Fac:	1.000
Matrix:	Air	Batch#:	155339
Units (V):	ppbv	Analyzed:	09/26/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC515432	Diln Fac:	1.000
Matrix:	Air	Batch#:	155742
Units (V):	ppbv	Analyzed:	10/06/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155742
Units (V):	ppbv	Analyzed:	10/06/09
Diln Fac:	1.000		

Type: BS Lab ID: QC515433

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.974	100	70-130	
Vinyl Chloride	10.00	9.858	99	70-130	
Chloroethane	10.00	11.43	114	70-130	
Trichlorofluoromethane	10.00	9.935	99	70-130	
1,1-Dichloroethene	10.00	10.94	109	70-130	
Methylene Chloride	10.00	7.523	75	70-130	
Freon 113	10.00	10.61	106	70-130	
trans-1,2-Dichloroethene	10.00	10.07	101	70-130	
1,1-Dichloroethane	10.00	10.14	101	70-130	
MTBE	10.00	10.81	108	70-130	
cis-1,2-Dichloroethene	10.00	10.20	102	70-130	
n-Hexane	10.00	10.49	105	70-130	
Chloroform	10.00	10.58	106	70-130	
1,2-Dichloroethane	10.00	9.397	94	70-130	
1,1,1-Trichloroethane	10.00	9.785	98	70-130	
Benzene	10.00	9.731	97	70-130	
Carbon Tetrachloride	10.00	9.601	96	70-130	
1,4-Dioxane	10.00	9.285	93	70-130	
Trichloroethene	10.00	8.492	85	70-130	
Toluene	10.00	9.926	99	70-130	
Tetrachloroethene	10.00	9.475	95	70-130	
Ethylbenzene	10.00	10.27	103	70-130	
m,p-Xylenes	20.00	20.38	102	70-130	
o-Xylene	10.00	10.13	101	70-130	
1,3,5-Trimethylbenzene	10.00	9.965	100	70-130	
1,2,4-Trimethylbenzene	10.00	10.42	104	70-130	
1,4-Dichlorobenzene	10.00	9.510	95	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155742
Units (V):	ppbv	Analyzed:	10/06/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC515434

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.568	96	70-130	4	25	
Vinyl Chloride	10.00	9.401	94	70-130	5	25	
Chloroethane	10.00	10.64	106	70-130	7	25	
Trichlorofluoromethane	10.00	9.407	94	70-130	5	25	
1,1-Dichloroethene	10.00	10.39	104	70-130	5	25	
Methylene Chloride	10.00	7.467	75	70-130	1	25	
Freon 113	10.00	10.01	100	70-130	6	25	
trans-1,2-Dichloroethene	10.00	9.659	97	70-130	4	25	
1,1-Dichloroethane	10.00	9.490	95	70-130	7	25	
MTBE	10.00	10.03	100	70-130	7	25	
cis-1,2-Dichloroethene	10.00	9.611	96	70-130	6	25	
n-Hexane	10.00	10.02	100	70-130	5	25	
Chloroform	10.00	10.01	100	70-130	6	25	
1,2-Dichloroethane	10.00	9.410	94	70-130	0	25	
1,1,1-Trichloroethane	10.00	9.634	96	70-130	2	25	
Benzene	10.00	9.778	98	70-130	0	25	
Carbon Tetrachloride	10.00	9.468	95	70-130	1	25	
1,4-Dioxane	10.00	9.509	95	70-130	2	25	
Trichloroethene	10.00	8.561	86	70-130	1	25	
Toluene	10.00	9.667	97	70-130	3	25	
Tetrachloroethene	10.00	9.459	95	70-130	0	25	
Ethylbenzene	10.00	10.12	101	70-130	1	25	
m,p-Xylenes	20.00	20.14	101	70-130	1	25	
o-Xylene	10.00	9.896	99	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	9.844	98	70-130	1	25	
1,2,4-Trimethylbenzene	10.00	10.26	103	70-130	2	25	
1,4-Dichlorobenzene	10.00	9.401	94	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209352473000 File : 244 Time : 01-SEP-2009 14:32

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	93833	11.82	
75	30% - 66% of mass 95	290381	36.58	
95		793787	100.00	
96	5% - 9% of mass 95	51650	6.51	
173	< 2% of mass 174	1737	0.41	
174	50% - 120% of mass 95	423925	53.41	
175	4% - 9% of mass 174	27742	6.54	
176	93% - 101% of mass 174	414617	97.80	
177	5% - 9% of mass 176	25564	6.17	

CURTIS & TOMPKINS BFB TUNE FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209387731001 File : 269_001 Time : 26-SEP-2009 06:11

Standards: S12824

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	49313	11.57	
75	30% - 66% of mass 95	162759	38.17	
95		426380	100.00	
96	5% - 9% of mass 95	28332	6.64	
173	< 2% of mass 174	732	0.31	
174	50% - 120% of mass 95	238518	55.94	
175	4% - 9% of mass 174	15533	6.51	
176	93% - 101% of mass 174	224249	94.02	
177	5% - 9% of mass 176	14030	6.26	

CURTIS & TOMPKINS BFB TUNE FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209402039015 File : 278_015 Time : 05-OCT-2009 23:31

Standards: S13044 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	71543	11.09	
75	30% - 66% of mass 95	239418	37.11	
95		645234	100.00	
96	5% - 9% of mass 95	38635	5.99	
173	< 2% of mass 174	610	0.17	
174	50% - 120% of mass 95	353664	54.81	
175	4% - 9% of mass 174	26866	7.60	
176	93% - 101% of mass 174	341791	96.64	
177	5% - 9% of mass 176	23681	6.93	

CURTIS & TOMPKINS BFB TUNE FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209402865001 File : 279_001 Time : 06-OCT-2009 18:25

Standards: S13044

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62910	10.61	
75	30% - 66% of mass 95	222645	37.56	
95		592802	100.00	
96	5% - 9% of mass 95	40306	6.80	
173	< 2% of mass 174	1137	0.34	
174	50% - 120% of mass 95	337376	56.91	
175	4% - 9% of mass 174	22919	6.79	
176	93% - 101% of mass 174	327469	97.06	
177	5% - 9% of mass 176	22059	6.74	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214904 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001
Units : nL/L

Date : 01-SEP-2009 17:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	244_003	1209352473003	NONE	01-SEP-2009 17:32	S12813 (6X), S12824 (15X)
L2	244_004	1209352473004	NONE	01-SEP-2009 18:33	S12813 (2X), S12824 (15X)
L3	244_005	1209352473005	NONE	01-SEP-2009 19:33	S12812 (6X), S12824 (15X)
L4	244_006	1209352473006	NONE	01-SEP-2009 20:35	S12812 (2X), S12824 (15X)
L5	244_007	1209352473007	NONE	01-SEP-2009 21:35	S12812, S12824 (15X)
L6	244_008	1209352473008	NONE	01-SEP-2009 22:35	S12811 (6X), S12824 (15X)
L7	244_009	1209352473009	NONE	01-SEP-2009 23:36	S12811 (3X), S12824 (15X)
L8	244_010	1209352473010	NONE	02-SEP-2009 00:36	S12811 (2X), S12824 (15X)
L9	244_011	1209352473011	NONE	02-SEP-2009 01:37	S12811, S12824 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	3.1846	2.8600	3.3516	2.9473	2.7130	3.3595	2.8900	2.8073	2.7019	AVRG		0.33563		2.9795	9	0.99	30	
Vinyl Chloride	0.8486m	0.7232m	0.8566	0.7823	0.7390m	0.9340	0.8440	0.8036	0.7575	AVRG		1.23478		0.8099	8	0.99	30	
Chloroethane	0.0795m	0.0689	0.0868	0.0815	0.0798	0.0990	0.0818	0.0729	0.0544	AVRG		12.7745		0.0783	16	0.99	30	
Trichlorofluoromethane	4.2992	3.7889	4.2690	3.7779	3.4124	4.2009	3.6549	3.5393	3.4039	AVRG		0.26204		3.8163	9	0.99	30	
1,1-Dichloroethene	1.1416	1.0157	1.3140	1.1598	1.0637	1.4166	1.1705	1.0809	0.9422	AVRG		0.87336		1.1450	13	0.99	30	
Methylene Chloride		0.6384	0.7817m	0.7230m	0.7001	0.9167	0.8221	0.7854m	0.7430	AVRG		1.30921		0.7638	11	0.99	30	
Freon 113	3.0637	2.6032	2.9718	2.5703	2.4209	2.8767	2.5377	2.3703	2.1410	AVRG		0.38207		2.6173	12	0.99	30	
trans-1,2-Dichloroethene	2.0790m	1.8131	2.2162	1.5665	0.7907	2.3430	1.8584	1.8353	1.5379	AVRG		0.56109		1.7822	26	0.99	30	
1,1-Dichloroethane	2.4433	2.1087	2.4696	2.1568	1.3408	2.5871	2.2958	2.2613	2.1797	AVRG		0.45356		2.2048	16	0.99	30	
MTBE	1.1293	1.1415	1.3534	1.2124	1.1150	1.3181	1.1333	1.1205	0.9777	AVRG		0.85704		1.1668	10	0.99	30	
cis-1,2-Dichloroethene	2.3518m	1.8951	2.3335	2.0300	1.8169	2.4258	2.0376	1.8795	1.5894	AVRG		0.49020		2.0400	14	0.99	30	
n-Hexane	0.9384	0.8100	0.9207	0.8446	0.7909	0.9660	0.8191	0.8004	0.7596	AVRG		1.17651		0.8500	9	0.99	30	
Chloroform	2.6746	2.3864	2.8044	2.4333	2.2606	2.7080	2.3318	2.1381	1.8062	AVRG		0.41776		2.3937	13	0.99	30	
1,2-Dichloroethane	0.6970	0.5980	0.7579	0.6451	0.6209	0.7427	0.6704	0.6254	0.5751	AVRG		1.51710		0.6592	10	0.99	30	
1,1,1-Trichloroethane	1.0004	0.8599	0.9923	0.8452	0.8047	0.9440	0.8441	0.7933	0.7461	AVRG		1.14943		0.8700	10	0.99	30	
Benzene	0.5326m	0.4404	0.5218	0.4510	0.4073	0.4806	0.4329	0.3951	0.3523	AVRG		2.24220		0.4460	13	0.99	30	
Carbon Tetrachloride	1.1450	0.9850	1.1784	0.9738	0.9498	1.1271	1.0432	0.9821	0.9556	AVRG		0.96361		1.0378	9	0.99	30	
1,4-Dioxane	0.1259	0.1110	0.1427m	0.1244	0.1312	0.1750	0.1846			AVRG		7.03657		0.1421	19	0.99	30	
Trichloroethene	0.6408	0.5153	0.6449	0.5421	0.5167	0.5527m	0.4827m	0.4036m	0.3086m	AVRG		1.95339		0.5119	21	0.99	30	
Toluene	1.9107	1.5223	1.8192	1.5664	1.5087	1.7742	1.5273	1.4440	1.2838	AVRG		0.62689		1.5952	13	0.99	30	
Tetrachloroethene	0.6490	0.5350	0.6525	0.5296	0.4953	0.5572	0.4663	0.4240	0.3767	AVRG		1.92082		0.5206	18	0.99	30	
Ethylbenzene	2.3366	1.9432	2.2472	1.9853	1.8779	2.1407	1.7680	1.6182	1.3309	AVRG		0.52179		1.9165	16	0.99	30	
m,p-Xylenes	2.2217	1.9061	2.1470	1.8450m	1.6886	1.9320	1.5622	1.4241	1.1537	AVRG		0.56674		1.7645	19	0.99	30	
o-Xylene	2.1480	1.7197	2.0551	1.7146	1.6047	1.8168	1.3907	1.2485	1.0994	AVRG		0.60822		1.6441	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.4679	2.1332	2.6100	2.2026	2.0325	2.4536	1.9729	1.8152	1.5580	AVRG		0.46763		2.1384	16	0.99	30	
1,2,4-Trimethylbenzene	2.2783	2.0892	2.5855	2.1453	1.9919	2.2896	1.8861	1.7234	1.4233	AVRG		0.48880		2.0458	17	0.99	30	
1,4-Dichlorobenzene	1.5160	1.2691	1.5411	1.3158	1.2548	1.5204	1.3011	1.1799	1.1230	AVRG		0.74867		1.3357	12	0.99	30	
Bromofluorobenzene	0.7455	0.7522	0.7467	0.7390	0.7216	0.7574	0.7232	0.7546	0.7053	AVRG		1.35429		0.7384	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.167	7	0.500	-4	1.667	12	5.000	-1	10.00	-9	16.67	13	33.33	-3	50.00	-6	100.0	-9
Vinyl Chloride	0.167	5	0.500	-11	1.667	6	5.000	-3	10.00	-9	16.67	15	33.33	4	50.00	-1	100.0	-6
Chloroethane	0.167	2	0.500	-12	1.667	11	5.000	4	10.00	2	16.67	**26**	33.33	5	50.00	-7	100.0	**-31**
Trichlorofluoromethane	0.167	13	0.500	-1	1.667	12	5.000	-1	10.00	-11	16.67	10	33.33	-4	50.00	-7	100.0	-11
1,1-Dichloroethene	0.167	0	0.500	-11	1.667	15	5.000	1	10.00	-7	16.67	**24**	33.33	2	50.00	-6	100.0	-18
Methylene Chloride			0.500	-16	1.667	2	5.000	-5	10.00	-8	16.67	20	33.33	8	50.00	3	100.0	-3
Freon 113	0.167	17	0.500	-1	1.667	14	5.000	-2	10.00	-8	16.67	10	33.33	-3	50.00	-9	100.0	-18
trans-1,2-Dichloroethene	0.167	17	0.500	2	1.667	**24**	5.000	-12	10.00	**-56**	16.67	**31**	33.33	4	50.00	3	100.0	-14
1,1-Dichloroethane	0.167	11	0.500	-4	1.667	12	5.000	-2	10.00	**-39**	16.67	17	33.33	4	50.00	3	100.0	-1
MTBE	0.167	-3	0.500	-2	1.667	16	5.000	4	10.00	-4	16.67	13	33.33	-3	50.00	-4	100.0	-16
cis-1,2-Dichloroethene	0.167	15	0.500	-7	1.667	14	5.000	0	10.00	-11	16.67	19	33.33	0	50.00	-8	100.0	**-22**
n-Hexane	0.167	10	0.500	-5	1.667	8	5.000	-1	10.00	-7	16.67	14	33.33	-4	50.00	-6	100.0	-11
Chloroform	0.167	12	0.500	0	1.667	17	5.000	2	10.00	-6	16.67	13	33.33	-3	50.00	-11	100.0	**-25**
1,2-Dichloroethane	0.167	6	0.500	-9	1.667	15	5.000	-2	10.00	-6	16.67	13	33.33	2	50.00	-5	100.0	-13
1,1,1-Trichloroethane	0.167	15	0.500	-1	1.667	14	5.000	-3	10.00	-8	16.67	9	33.33	-3	50.00	-9	100.0	-14
Benzene	0.167	19	0.500	-1	1.667	17	5.000	1	10.00	-9	16.67	8	33.33	-3	50.00	-11	100.0	**-21**
Carbon Tetrachloride	0.167	10	0.500	-5	1.667	14	5.000	-6	10.00	-8	16.67	9	33.33	1	50.00	-5	100.0	-8
1,4-Dioxane	0.167	-11	0.500	**-22**	1.667	0	5.000	-12	10.00	-8	16.67	**23**	33.33	**30**				
Trichloroethene	0.167	**25**	0.500	1	1.667	**26**	5.000	6	10.00	1	16.67	8	33.33	-6	50.00	**-21**	100.0	**-40**
Toluene	0.167	20	0.500	-5	1.667	14	5.000	-2	10.00	-5	16.67	11	33.33	-4	50.00	-9	100.0	-20
Tetrachloroethene	0.167	**25**	0.500	3	1.667	**25**	5.000	2	10.00	-5	16.67	7	33.33	-10	50.00	-19	100.0	**-28**
Ethylbenzene	0.167	**22**	0.500	1	1.667	17	5.000	4	10.00	-2	16.67	12	33.33	-8	50.00	-16	100.0	**-31**
m,p-Xylenes	0.333	**26**	1.000	8	3.333	**22**	10.00	5	20.00	-4	33.33	9	66.67	-11	100.0	-19	200.0	**-35**
o-Xylene	0.167	**31**	0.500	5	1.667	**25**	5.000	4	10.00	-2	16.67	11	33.33	-15	50.00	**-24**	100.0	**-33**
1,3,5-Trimethylbenzene	0.167	15	0.500	0	1.667	**22**	5.000	3	10.00	-5	16.67	15	33.33	-8	50.00	-15	100.0	**-27**
1,2,4-Trimethylbenzene	0.167	11	0.500	2	1.667	**26**	5.000	5	10.00	-3	16.67	12	33.33	-8	50.00	-16	100.0	**-30**
1,4-Dichlorobenzene	0.167	14	0.500	-5	1.667	15	5.000	-1	10.00	-6	16.67	14	33.33	-3	50.00	-12	100.0	-16
Bromofluorobenzene	10.00	1	10.00	2	10.00	1	10.00	0	10.00	-2	10.00	3	10.00	-2	10.00	2	10.00	-4

SJD 09/02/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209352473001 Cal Date : 01-SEP-2009

ICV 1209352473013 (244_013 02-SEP-2009) stds: S12815, S12824 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.364	nL/L	-6	30	
Vinyl Chloride	10.00	9.229	nL/L	-8	30	
Chloroethane	10.00	10.08	nL/L	1	30	
Trichlorofluoromethane	10.00	9.136	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.794	nL/L	-2	30	
Methylene Chloride	10.00	9.786	nL/L	-2	30	
Freon 113	10.00	9.702	nL/L	-3	30	
trans-1,2-Dichloroethene	10.00	6.991	nL/L	-30	30	!v-
1,1-Dichloroethane	10.00	9.380	nL/L	-6	30	
MTBE	10.00	10.02	nL/L	0	30	
cis-1,2-Dichloroethene	10.00	9.245	nL/L	-8	30	
n-Hexane	10.00	9.336	nL/L	-7	30	
Chloroform	10.00	9.492	nL/L	-5	30	
1,2-Dichloroethane	10.00	9.377	nL/L	-6	30	
1,1,1-Trichloroethane	10.00	9.305	nL/L	-7	30	
Benzene	10.00	9.247	nL/L	-8	30	
Carbon Tetrachloride	10.00	8.903	nL/L	-11	30	
1,4-Dioxane	10.00	7.831	nL/L	-22	30	!v-
Trichloroethene	10.00	9.447	nL/L	-6	30	
Toluene	10.00	9.762	nL/L	-2	30	
Tetrachloroethene	10.00	9.542	nL/L	-5	30	
Ethylbenzene	10.00	9.708	nL/L	-3	30	
m,p-Xylenes	20.00	20.15	nL/L	1	30	m
o-Xylene	10.00	9.690	nL/L	-3	30	
1,3,5-Trimethylbenzene	10.00	9.799	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	9.912	nL/L	-1	30	
1,4-Dichlorobenzene	10.00	9.870	nL/L	-1	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214904 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001
Units : nL/L

Date : 06-OCT-2009 03:40
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	278_019	1209402039019	NONE	06-OCT-2009 03:40	S13093 (2X), S13044 (15X)
L2	278_020	1209402039020	NONE	06-OCT-2009 04:39	S13092 (6X), S13044 (15X)
L3	278_021	1209402039021	NONE	06-OCT-2009 05:40	S13092 (2X), S13044 (15X)
L4	278_022	1209402039022	NONE	06-OCT-2009 06:39	S13092, S13044 (15X)
L5	278_023	1209402039023	NONE	06-OCT-2009 07:39	S13091 (6X), S13044 (15X)
L6	278_024	1209402039024	NONE	06-OCT-2009 08:39	S13091 (3X), S13044 (15X)
L7	278_025	1209402039025	NONE	06-OCT-2009 09:38	S13091 (2X), S13044 (15X)
L8	278_026	1209402039026	NONE	06-OCT-2009 10:38	S13091, S13044 (15X)
L9	278_030	1209402039030	NONE	06-OCT-2009 14:38	S13093 (6X), S13044 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	2.8405	3.3043	2.8800	2.6790	3.2536	2.7319	2.6142	2.3262	3.3901	AVRG		0.34589		2.8911	12	0.99	30	
Vinyl Chloride	0.4208m	0.5795m	0.5394m	0.5316	0.6977	0.6186	0.6731	0.5454	0.3688m	AVRG		1.80906		0.5528	19	0.99	30	
Chloroethane	0.0535m	0.0761	0.0732	0.0727	0.0929	0.0737	0.0659	0.0459	0.0586m	AVRG		14.6930		0.0681	20	0.99	30	
Trichlorofluoromethane	3.5742	4.1688	3.6361	3.3806	4.0861	3.4093	3.1916	2.8640	4.5297	AVRG		0.27405		3.6489	14	0.99	30	
1,1-Dichloroethene	0.9224	1.2213	1.0764	1.0199	1.3098	1.0559	0.9810	0.7957	1.0367	AVRG		0.95551		1.0466	15	0.99	30	
Methylene Chloride	0.6289m	1.2623m	0.7372m	0.7054	1.4280	0.9114	0.9503		1.1201	AVRG		1.03311		0.9679	29	0.99	30	
Freon 113	2.6647	3.0476	2.6608	2.4612	2.8819	2.4253	2.2488	1.9144	3.2988	AVRG		0.38130		2.6226	16	0.99	30	
trans-1,2-Dichloroethene	1.7451	2.1915	1.9357	1.7717	2.2645	1.8472	1.7026	1.3654	2.1393	AVRG		0.53057		1.8848	15	0.99	30	
1,1-Dichloroethane	2.0868	2.4714	2.1346	2.0356m	2.5074	2.1759	2.1059	1.9411	2.4710	AVRG		0.45159		2.2144	10	0.99	30	
MTBE	1.0124m	1.2977	1.1781	1.1085	1.3443	1.1082	1.0351	0.8656	1.1082m	AVRG		0.89480		1.1176	13	0.99	30	
cis-1,2-Dichloroethene	1.7870	2.2028	1.8824	1.7244	2.2864	1.8581	1.7266	1.3931	2.1233	AVRG		0.52991		1.8871	15	0.99	30	
n-Hexane	0.7627	0.9403	0.8097	0.7731	0.9653	0.7782	0.7471	0.6427	0.9276	AVRG		1.22505		0.8163	13	0.99	30	
Chloroform	2.4294	2.7477	2.3978	2.1577	2.5645	2.0228	1.9130	1.5088	2.9417	AVRG		0.43513		2.2982	19	0.99	30	
1,2-Dichloroethane	0.5984	0.7249	0.6240	0.5795	0.7308	0.6501	0.5984	0.5484	0.7337	AVRG		1.55489		0.6431	11	0.99	30	
1,1,1-Trichloroethane	0.8381	0.9510	0.8170	0.7503	0.8935m	0.8025	0.7611	0.7118	0.9990	AVRG		1.19613		0.8360	11	0.99	30	
Benzene	0.4250	0.5015	0.4268	0.3964	0.4716	0.4139	0.3838	0.3454	0.5220	AVRG		2.31577		0.4318	13	0.99	30	
Carbon Tetrachloride	0.9828	1.1201	0.9721	0.9071	1.1126	0.9860	0.9275	0.8970	1.1935	AVRG		0.98915		1.0110	10	0.99	30	
1,4-Dioxane	0.0957	0.1300	0.1199	0.1300m	0.1925				0.1063m	AVRG		7.74826		0.1291	26	0.99	30	
Trichloroethene	0.4738	0.8220	0.6773	0.5859	0.5161	0.4278	0.3784m			AVRG		1.80353		0.5545	28	0.99	30	
Toluene	1.3988	1.7195	1.4640	1.4269	1.7009	1.4817	1.3702	1.2342	1.6037	AVRG		0.67164		1.4889	11	0.99	30	
Tetrachloroethene	0.5457	0.6275	0.5159	0.4729	0.5450	0.4758	0.4154	0.3541	0.6342	AVRG		1.96228		0.5096	18	0.99	30	
Ethylbenzene	1.7573	2.2065	1.8689	1.7757	2.1207	1.7156	1.5669	1.3132	1.9844	AVRG		0.55184		1.8121	15	0.99	30	
m,p-Xylenes	1.7649	2.1417m	1.7770m	1.6502m	1.9262	1.5282	1.3253m	1.1120	1.9850	AVRG		0.59170		1.6901	19	0.99	30	
o-Xylene	1.7386	1.9975	1.6749	1.5506	1.7626	1.3408	1.1776	1.0433	1.9223	AVRG		0.63344		1.5787	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.1410	2.6275	2.1521	2.0061	2.4538	1.9641	1.8206	1.5516	2.3024	AVRG		0.47320		2.1133	15	0.99	30	
1,2,4-Trimethylbenzene	1.8528	2.4939	2.1088	1.9492	2.3110	1.8994	1.6872	1.4222	1.7971	AVRG		0.51365		1.9469	17	0.99	30	
1,4-Dichlorobenzene	1.2918	1.5261	1.2552	1.2199	1.5010	1.3011	1.2117	1.1014	1.4237	AVRG		0.76067		1.3146	11	0.99	30	
Bromofluorobenzene	0.7460	0.7780	0.7557	0.7722	0.7890	0.7898	0.7709	0.7833	0.7743	AVRG		1.29326		0.7732	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	13	33.33	-6	50.00	-10	100.0	-20	0.167	17
Vinyl Chloride	0.500	**-24**	1.667	5	5.000	-2	10.00	-4	16.67	**26**	33.33	12	50.00	**22**	100.0	-1	0.167	**-33**
Chloroethane	0.500	**-21**	1.667	12	5.000	8	10.00	7	16.67	**36**	33.33	8	50.00	-3	100.0	**-33**	0.167	-14
Trichlorofluoromethane	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	12	33.33	-7	50.00	-13	100.0	**-22**	0.167	**24**
1,1-Dichloroethene	0.500	-12	1.667	17	5.000	3	10.00	-3	16.67	**25**	33.33	1	50.00	-6	100.0	**-24**	0.167	-1
Methylene Chloride	0.500	**-35**	1.667	**30**	5.000	**-24**	10.00	**-27**	16.67	**48**	33.33	-6	50.00	-2			0.167	16
Freon 113	0.500	2	1.667	16	5.000	1	10.00	-6	16.67	10	33.33	-8	50.00	-14	100.0	**-27**	0.167	**26**
trans-1,2-Dichloroethene	0.500	-7	1.667	16	5.000	3	10.00	-6	16.67	20	33.33	-2	50.00	-10	100.0	**-28**	0.167	14
1,1-Dichloroethane	0.500	-6	1.667	12	5.000	-4	10.00	-8	16.67	13	33.33	-2	50.00	-5	100.0	-12	0.167	12
MTBE	0.500	-9	1.667	16	5.000	5	10.00	-1	16.67	20	33.33	-1	50.00	-7	100.0	**-23**	0.167	-1
cis-1,2-Dichloroethene	0.500	-5	1.667	17	5.000	0	10.00	-9	16.67	**21**	33.33	-2	50.00	-9	100.0	**-26**	0.167	13
n-Hexane	0.500	-7	1.667	15	5.000	-1	10.00	-5	16.67	18	33.33	-5	50.00	-8	100.0	**-21**	0.167	14
Chloroform	0.500	6	1.667	20	5.000	4	10.00	-6	16.67	12	33.33	-12	50.00	-17	100.0	**-34**	0.167	**28**
1,2-Dichloroethane	0.500	-7	1.667	13	5.000	-3	10.00	-10	16.67	14	33.33	1	50.00	-7	100.0	-15	0.167	14
1,1,1-Trichloroethane	0.500	0	1.667	14	5.000	-2	10.00	-10	16.67	7	33.33	-4	50.00	-9	100.0	-15	0.167	19
Benzene	0.500	-2	1.667	16	5.000	-1	10.00	-8	16.67	9	33.33	-4	50.00	-11	100.0	-20	0.167	**21**
Carbon Tetrachloride	0.500	-3	1.667	11	5.000	-4	10.00	-10	16.67	10	33.33	-2	50.00	-8	100.0	-11	0.167	18
1,4-Dioxane	0.500	**-26**	1.667	1	5.000	-7	10.00	1	16.67	**49**							0.167	-18
Trichloroethene	0.500	-15	1.667	**48**	5.000	**22**	10.00	6	16.67	-7	33.33	**-23**	50.00	**-32**				
Toluene	0.500	-6	1.667	15	5.000	-2	10.00	-4	16.67	14	33.33	0	50.00	-8	100.0	-17	0.167	8
Tetrachloroethene	0.500	7	1.667	**23**	5.000	1	10.00	-7	16.67	7	33.33	-7	50.00	-18	100.0	**-31**	0.167	**24**
Ethylbenzene	0.500	-3	1.667	**22**	5.000	3	10.00	-2	16.67	17	33.33	-5	50.00	-14	100.0	**-28**	0.167	10
m,p-Xylenes	1.000	4	3.333	**27**	10.00	5	20.00	-2	33.33	14	66.67	-10	100.0	**-22**	200.0	**-34**	0.333	17
o-Xylene	0.500	10	1.667	**27**	5.000	6	10.00	-2	16.67	12	33.33	-15	50.00	**-25**	100.0	**-34**	0.167	**22**
1,3,5-Trimethylbenzene	0.500	1	1.667	**24**	5.000	2	10.00	-5	16.67	16	33.33	-7	50.00	-14	100.0	**-27**	0.167	9
1,2,4-Trimethylbenzene	0.500	-5	1.667	**28**	5.000	8	10.00	0	16.67	19	33.33	-2	50.00	-13	100.0	**-27**	0.167	-8
1,4-Dichlorobenzene	0.500	-2	1.667	16	5.000	-5	10.00	-7	16.67	14	33.33	-1	50.00	-8	100.0	-16	0.167	8
Bromofluorobenzene	10.00	-4	10.00	1	10.00	-2	10.00	0	10.00	2	10.00	2	10.00	0	10.00	1	10.00	0

SJD 10/06/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001 Cal Date : 06-OCT-2009

ICV 1209402039031 (278_031 06-OCT-2009) stds: S13086, S13044 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.813	nL/L	-2	30	
Vinyl Chloride	10.00	10.60	nL/L	6	30	m
Chloroethane	10.00	10.99	nL/L	10	30	
Trichlorofluoromethane	10.00	9.671	nL/L	-3	30	
1,1-Dichloroethene	10.00	10.58	nL/L	6	30	
Methylene Chloride	10.00	7.287	nL/L	**-27**	30	!v-
Freon 113	10.00	10.31	nL/L	3	30	
trans-1,2-Dichloroethene	10.00	9.859	nL/L	-1	30	
1,1-Dichloroethane	10.00	9.627	nL/L	-4	30	
MTBE	10.00	10.22	nL/L	2	30	
cis-1,2-Dichloroethene	10.00	9.793	nL/L	-2	30	
n-Hexane	10.00	9.975	nL/L	0	30	
Chloroform	10.00	10.20	nL/L	2	30	
1,2-Dichloroethane	10.00	9.524	nL/L	-5	30	
1,1,1-Trichloroethane	10.00	9.886	nL/L	-1	30	
Benzene	10.00	9.859	nL/L	-1	30	
Carbon Tetrachloride	10.00	9.546	nL/L	-5	30	
1,4-Dioxane	10.00	9.502	nL/L	-5	30	
Trichloroethene	10.00	8.640	nL/L	-14	30	
Toluene	10.00	9.721	nL/L	-3	30	
Tetrachloroethene	10.00	9.095	nL/L	-9	30	
Ethylbenzene	10.00	10.05	nL/L	0	30	
m,p-Xylenes	20.00	19.74	nL/L	-1	30	m
o-Xylene	10.00	9.758	nL/L	-2	30	
1,3,5-Trimethylbenzene	10.00	9.827	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	10.02	nL/L	0	30	
1,4-Dichlorobenzene	10.00	9.097	nL/L	-9	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC513778 IDF : 1.0
Seqnum : 1209387731003.1 File : 269_003 Time : 26-SEP-2009 08:10
Cal : 1209352473001 Caldate : 01-SEP-2009
Standards: S12815, S12824 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.9795	2.9909	10.00	10.04	nL/L	0	30	u
Vinyl Chloride	0.8099	0.7854	10.00	9.700	nL/L	-3	30	u
Chloroethane	0.0783	0.0804	10.00	10.27	nL/L	3	30	u
Trichlorofluoromethane	3.8163	3.6853	10.00	9.659	nL/L	-3	30	u
1,1-Dichloroethene	1.1450	1.2050	10.00	10.53	nL/L	5	30	u
Methylene Chloride	0.7638	0.7388	10.00	9.672	nL/L	-3	30	u
Freon 113	2.6173	2.7986	10.00	10.70	nL/L	7	30	u
trans-1,2-Dichloroethene	1.7822	1.9739	10.00	11.08	nL/L	11	30	!v- u
1,1-Dichloroethane	2.2048	2.2702	10.00	10.30	nL/L	3	30	u
MTBE	1.1668	1.2218	10.00	10.48	nL/L	5	30	u
cis-1,2-Dichloroethene	2.0400	2.0023	10.00	9.821	nL/L	-2	30	u
n-Hexane	0.8500	0.8690	10.00	10.23	nL/L	2	30	u
Chloroform	2.3937	2.4719	10.00	10.33	nL/L	3	30	u
1,2-Dichloroethane	0.6592	0.6766	10.00	10.27	nL/L	3	30	u
1,1,1-Trichloroethane	0.8700	0.8806	10.00	10.12	nL/L	1	30	u
Benzene	0.4460	0.4570	10.00	10.25	nL/L	3	30	u
Carbon Tetrachloride	1.0378	0.8654	10.00	8.341	nL/L	-17	30	u
1,4-Dioxane	0.1421	0.1339	10.00	9.428	nL/L	-6	30	!v- u
Trichloroethene	0.5119	0.5089	10.00	9.945	nL/L	-1	30	u
Toluene	1.5952	1.8052	10.00	11.32	nL/L	13	30	u
Tetrachloroethene	0.5206	0.6082	10.00	11.69	nL/L	17	30	u
Ethylbenzene	1.9165	2.2448	10.00	11.72	nL/L	17	30	u
m,p-Xylenes	1.7645	2.1058	20.00	23.86	nL/L	19	30	u
o-Xylene	1.6441	1.9434	10.00	11.83	nL/L	18	30	u
1,3,5-Trimethylbenzene	2.1384	2.5105	10.00	11.75	nL/L	17	30	u
1,2,4-Trimethylbenzene	2.0458	2.4487	10.00	11.98	nL/L	20	30	u
1,4-Dichlorobenzene	1.3357	1.5141	10.00	11.34	nL/L	13	30	u
Bromofluorobenzene	0.7384	0.7262	10.00	9.838	nL/L	-2	30	u

ISTD (ICAL 244_010)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	1159450	951899	-17.90	27.15	27.19	0.04
1,4-Difluorobenzene	4209375	3374000	-19.85	31.87	31.91	0.04
Chlorobenzene-d5	3611816	2721000	-24.66	41.74	41.76	0.02

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214904 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC515433 IDF : 1.0
Seqnum : 1209402865002.1 File : 279_002 Time : 06-OCT-2009 20:46
Cal : 1209402039001 Caldate : 06-OCT-2009
Standards: S13086, S13044 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.8911	2.8830	10.00	9.974	nL/L	0	30	u
Vinyl Chloride	0.5528	0.5448	10.00	9.858	nL/L	-1	30	u
Chloroethane	0.0681	0.0778	10.00	11.43	nL/L	14	30	u
Trichlorofluoromethane	3.6489	3.6242	10.00	9.935	nL/L	-1	30	u
1,1-Dichloroethene	1.0466	1.1448	10.00	10.94	nL/L	9	30	u
Methylene Chloride	0.9679	0.7280	10.00	7.523	nL/L	-25	30	!v- u
Freon 113	2.6226	2.7820	10.00	10.61	nL/L	6	30	u
trans-1,2-Dichloroethene	1.8848	1.8988	10.00	10.07	nL/L	1	30	u
1,1-Dichloroethane	2.2144	2.2453	10.00	10.14	nL/L	1	30	u
MTBE	1.1176	1.2069	10.00	10.81	nL/L	8	30	u
cis-1,2-Dichloroethene	1.8871	1.9252	10.00	10.20	nL/L	2	30	u
n-Hexane	0.8163	0.8556	10.00	10.49	nL/L	5	30	u
Chloroform	2.2982	2.4306	10.00	10.58	nL/L	6	30	u
1,2-Dichloroethane	0.6431	0.6042	10.00	9.397	nL/L	-6	30	u
1,1,1-Trichloroethane	0.8360	0.8177	10.00	9.785	nL/L	-2	30	u
Benzene	0.4318	0.4200	10.00	9.731	nL/L	-3	30	u
Carbon Tetrachloride	1.0110	0.9700	10.00	9.601	nL/L	-4	30	u
1,4-Dioxane	0.1291	0.1198	10.00	9.285	nL/L	-7	30	u
Trichloroethene	0.5545	0.4706	10.00	8.492	nL/L	-15	30	u
Toluene	1.4889	1.4778	10.00	9.926	nL/L	-1	30	u
Tetrachloroethene	0.5096	0.4828	10.00	9.475	nL/L	-5	30	u
Ethylbenzene	1.8121	1.8601	10.00	10.27	nL/L	3	30	u
m,p-Xylenes	1.6901	1.7220	20.00	20.38	nL/L	2	30	u
o-Xylene	1.5787	1.5983	10.00	10.13	nL/L	1	30	u
1,3,5-Trimethylbenzene	2.1133	2.1055	10.00	9.965	nL/L	0	30	u
1,2,4-Trimethylbenzene	1.9469	2.0280	10.00	10.42	nL/L	4	30	u
1,4-Dichlorobenzene	1.3146	1.2500	10.00	9.510	nL/L	-5	30	u
Bromofluorobenzene	0.7732	0.7826	10.00	10.12	nL/L	1	30	u

ISTD (ICAL 278_025)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	924937	831070	-10.15	27.18	27.20	0.02
1,4-Difluorobenzene	3256000	3100000	-4.79	31.90	31.93	0.03
Chlorobenzene-d5	2877000	2788000	-3.09	41.76	41.79	0.03

SJD 10/12/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution. [general version]

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209387731

Date : 09/26/09 Reference : 244_010
Sequence : MSAIR01 269 Analyzed : 09/02/09 00:36

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	1159450	27.15	4209375	31.87	3611816	41.74
		LOWER LIMIT	695670	26.82	2525625	31.54	2167090	41.41
		UPPER LIMIT	1623230	27.48	5893125	32.20	5056542	42.07
002	IB	NONE	930582	27.22	3241000	31.94	2596000	41.79
003	CCV/BS	QC513778	951899	27.19	3374000	31.91	2721000	41.76
004	BSD	QC513779	915606	27.17	3338000	31.90	2764000	41.75
005	BLANK	QC513777	940380	27.18	3413000	31.90	2739000	41.75
006	BLANK	QC513832	1003000	27.20	3552000	31.93	2889000	41.78
007	SAMPLE	214998-001	934577	27.19	3461000	31.92	2704000	41.79
008	SAMPLE	214998-002	993996	27.19	3554000	31.92	2898000	41.78
009	SAMPLE	214904-001	948193	27.20	3473000	31.92	2618000	41.78
010	SAMPLE	214904-004	913101	27.20	3390000	31.93	2121000 *	41.80
011	SAMPLE	214904-005	817126	27.19	2982000	31.92	2104000 *	41.79
012	SAMPLE	214904-006	786533	27.19	2900000	31.92	1827000 *	41.78
013	SAMPLE	214904-009	811864	27.20	2930000	31.92	1799000 *	41.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209402865

Date : 10/06/09 Reference : 278_025
Sequence : MSAIR01 279 Analyzed : 10/06/09 09:38

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	924937	27.18	3256000	31.90	2877000	41.76
		LOWER LIMIT	554962	26.85	1953600	31.57	1726200	41.43
		UPPER LIMIT	1294912	27.51	4558400	32.23	4027800	42.09
002	CCV/BS	QC515433	831070	27.20	3100000	31.93	2788000	41.79
003	BSD	QC515434	857897	27.19	3068000	31.92	2794000	41.78
004	BLANK	QC515432	920309	27.21	3231000	31.93	2916000	41.79
005	SAMPLE	214904-004	835912	27.20	3087000	31.93	2470000	41.79
006	SAMPLE	214904-005	904191	27.20	3306000	31.93	2743000	41.79
007	SAMPLE	214904-006	884014	27.21	3248000	31.93	2692000	41.79
008	SAMPLE	214904-009	881274	27.21	3295000	31.93	2632000	41.79
009	SAMPLE	214897-009	915050	27.21	3292000	31.94	2348000	41.80
010	SAMPLE	214904-001	871625	27.21	3198000	31.94	2854000	41.80
011	SAMPLE	214897-002	905062	27.20	3338000	31.93	2927000	41.79
012	SAMPLE	214897-005	915903	27.22	3295000	31.94	2351000	41.81
013	SAMPLE	214897-006	873536	27.21	3232000	31.94	2616000	41.80
014	SAMPLE	214897-007	900238	27.21	3249000	31.93	2770000	41.79
015	SAMPLE	214897-008	908504	27.20	3256000	31.92	2492000	41.79
016	SAMPLE	214904-005	898909	27.20	3258000	31.92	2773000	41.78
017	SAMPLE	214897-009	905974	27.21	3281000	31.93	2279000	41.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209352473

Instrument : MSAIR01 Begun : 09/01/09 14:32
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
000	244	TUN	BFB			09/01/09 14:32	1.0	1	
001	244_001	X	IB			09/01/09 15:32	1.0	1	
002	244_002	IB	CALIB IB			09/01/09 16:32	1.0	1	
003	244_003	ICAL	NONE			09/01/09 17:32	1.0	2 1	
004	244_004	ICAL	NONE			09/01/09 18:33	1.0	2 1	
005	244_005	ICAL	NONE			09/01/09 19:33	1.0	3 1	
006	244_006	ICAL	NONE			09/01/09 20:35	1.0	3 1	
007	244_007	ICAL	NONE			09/01/09 21:35	1.0	3 1	
008	244_008	ICAL	NONE			09/01/09 22:35	1.0	4 1	
009	244_009	ICAL	NONE			09/01/09 23:36	1.0	4 1	
010	244_010	ICAL	NONE			09/02/09 00:36	1.0	4 1	
011	244_011	ICAL	NONE			09/02/09 01:37	1.0	4 1	
012	244_012	IB	NONE			09/02/09 02:37	1.0	1	
013	244_013	ICV	NONE			09/02/09 03:37	1.0	5 1	

SJD 09/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 0 through 13.

Analyst: SJD Date: 09/02/09 Reviewer: BO Date: 09/03/09

Standards used: 1=S12824 2=S12813 3=S12812 4=S11811 5=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209387731

Instrument : MSAIR01 Begun : 09/26/09 06:11
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	269_001	TUN	BFB			09/26/09 06:11	1.0	1	
002	269_002	IB	NONE			09/26/09 07:10	1.0	1	
003	269_003	CCV/BS	QC513778	Air	155339	09/26/09 08:10	1.0	2 1	
004	269_004	BSD	QC513779	Air	155339	09/26/09 09:09	1.0	2 1	
005	269_005	BLANK	QC513777	Air	155339	09/26/09 10:08	1.0	1	
006	269_006	BLANK	QC513832	Air	155339	09/26/09 12:52	1.0	1	
007	269_007	SAMPLE	214998-001	Air	155339	09/26/09 13:51	2.26	1	
008	269_008	SAMPLE	214998-002	Air	155339	09/26/09 14:52	1.99	1	
009	269_009	SAMPLE	214904-001	Air	155339	09/26/09 15:52	3.11	1	1:DCA11=130
010	269_010	SAMPLE	214904-004	Air	155339	09/26/09 16:52	2.21	1	6:ACE=460
011	269_011	SAMPLE	214904-005	Air	155339	09/26/09 17:52	2.300	1	2:TCE=340
012	269_012	SAMPLE	214904-006	Air	155339	09/26/09 18:52	2.19	1	1:TCE=210
013	269_013	SAMPLE	214904-009	Air	155339	09/26/09 19:52	2.22	1	6:ACE=450

SJD 10/04/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 13.

Analyst: SJD Date: 10/04/09 Reviewer: BO Date: 10/05/09

Standards used: 1=S12824 2=S12815

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209402039

Instrument : MSAIR01 Begun : 10/05/09 09:34
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	278_001	X	BFB			10/05/09 09:34	1.0	1	
002	278_002	X	QC515024	Air	155636	10/05/09 10:34	1.0	2 1	
003	278_003	X	QC515025	Air	155636	10/05/09 11:34	1.0	2 1	
004	278_004	X	NONE			10/05/09 12:33	1.0	1	
005	278_005	X	CALIB IB			10/05/09 13:33	1.0	1	
006	278_006	X	NONE			10/05/09 14:33	1.0	3 1	
007	278_007	X	NONE			10/05/09 15:32	1.0	3 1	
008	278_008	X	NONE			10/05/09 16:32	1.0	4 1	
009	278_009	X	NONE			10/05/09 17:33	1.0	4 1	
010	278_010	X	NONE			10/05/09 18:32	1.0	4 1	
011	278_011	X	NONE			10/05/09 19:32	1.0	5 1	
012	278_012	X	NONE			10/05/09 20:32	1.0	5 1	
013	278_013	X	NONE			10/05/09 21:32	1.0	5 1	
014	278_014	X	NONE			10/05/09 22:31	1.0	5 1	
015	278_015	TUN	BFB			10/05/09 23:31	1.0	1	
016	278_016	X	NONE			10/06/09 00:30	1.0	2 1	
017	278_017	IB	CALIB IB			10/06/09 01:41	1.0	1	
018	278_018	X	NONE			10/06/09 02:40	1.0	3 1	
019	278_019	ICAL	NONE			10/06/09 03:40	1.0	3 1	
020	278_020	ICAL	NONE			10/06/09 04:39	1.0	4 1	
021	278_021	ICAL	NONE			10/06/09 05:40	1.0	4 1	
022	278_022	ICAL	NONE			10/06/09 06:39	1.0	4 1	
023	278_023	ICAL	NONE			10/06/09 07:39	1.0	5 1	
024	278_024	ICAL	NONE			10/06/09 08:39	1.0	5 1	
025	278_025	ICAL	NONE			10/06/09 09:38	1.0	5 1	
026	278_026	ICAL	NONE			10/06/09 10:38	1.0	5 1	
027	278_027	IB	NONE			10/06/09 11:38	1.0	1	
028	278_028	XICV	NONE			10/06/09 12:38	1.0	2 1	
029	278_029	IB	NONE			10/06/09 13:38	1.0	1	
030	278_030	ICAL	NONE			10/06/09 14:38	1.0	3 1	
031	278_031	ICV	NONE			10/06/09 15:39	1.0	2 1	

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

BO 10/07/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: SJD Date: 10/06/09 Reviewer: BO Date: 10/07/09

Standards used: 1=S13044 2=S13086 3=S13093 4=S13092 5=S13091

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209402865

Instrument : MSAIR01 Begun : 10/06/09 18:25
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	279_001	TUN	BFB			10/06/09 18:25	1.0	1	
002	279_002	CCV/BS	QC515433	Air	155742	10/06/09 20:46	1.0	2 1	
003	279_003	BSD	QC515434	Air	155742	10/06/09 21:46	1.0	2 1	
004	279_004	BLANK	QC515432	Air	155742	10/06/09 22:46	1.0	1	
005	279_005	SAMPLE	214904-004	Air	155742	10/06/09 23:46	26.52	1	
006	279_006	SAMPLE	214904-005	Air	155742	10/07/09 00:47	13.80	1	1:TCE=62
007	279_007	SAMPLE	214904-006	Air	155742	10/07/09 01:48	13.14	1	
008	279_008	SAMPLE	214904-009	Air	155742	10/07/09 02:48	26.64	1	
009	279_009	SAMPLE	214897-009	Air	155742	10/07/09 03:49	42.20	1	1:CYHEXANE=120
010	279_010	SAMPLE	214904-001	Air	155742	10/07/09 04:49	9.33	1	
011	279_011	SAMPLE	214897-002	Air	155742	10/07/09 05:48	2.26	1	
012	279_012	SAMPLE	214897-005	Air	155742	10/07/09 06:47	85.20	1	
013	279_013	SAMPLE	214897-006	Air	155742	10/07/09 07:47	12.96	1	
014	279_014	SAMPLE	214897-007	Air	155742	10/07/09 08:48	4.24	1	
015	279_015	SAMPLE	214897-008	Air	155742	10/07/09 09:47	6.27	1	
016	279_016	SAMPLE	214904-005	Air	155742	10/07/09 10:47	27.60	1	
017	279_017	SAMPLE	214897-009	Air	155742	10/07/09 11:48	84.40	1	

SJD 10/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

BO 10/12/09 : Matrix spikes were not performed for this analysis in batch 155742 because they are not required by the method.

Analyst: SJD Date: 10/12/09 Reviewer: BO Date: 10/12/09

Standards used: 1=S13044 2=S13086

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PROJECT _____

Continued From Page _____

~~Mapping Date~~	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Fac	Comments
9/23 MAP	214897-005	C00014	1.5 added	30.00	~~42.6x~~	~~20x of 2.13 x C00110~~
↓	↓ 006	C00203	↓	↓	~~43.2x~~	~~20x of 2.16 x C00172~~
500 9/26/07	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00058	10.81	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00192	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.18	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1203	—	—	1x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

PROJECT

Notebook No.

Continued From Page

Performed by Date	Sample ID	PANID	Initial (psig) pressure	Final (psig) pressure	Dilution Factor	Comments
9/21 AMP	214899-001	C00119	9.64	23.27	2.41x	
	002	C00152	10.67	25.35	2.38x	
	003	C00165	8.17	22.72	2.78x	
	004	C00093	9.44	22.96	2.43x	
	005	C00177	10.81	23.83	2.20x	
	006	C00144	9.85	22.42	2.28x	
	007	C00096	9.82	22.66	2.31x	
	Blank	C1705	—	—	1x	
	214807-004	C00020	3.0 added	30.00	23.4x	10x of 2.34x C00130
	808-003	C00034	1.5 added	30.00	40.2x	20x of 2.01x C00062
	004	C00031	↓	30.00	39.8x	20x of C00109 sample 1.99x
9/22 AMP	214891-001	C00052	7.69	23.30	3.03x	
	002	C00082	10.91	22.71	2.08x	
	003	C00058	11.27	24.38	2.16x	
	004	C00120	11.00	23.21	2.11x	
	005	C00076	11.68	23.81	2.04x	
	006	C00099	11.40	23.21	2.04x	
	007	C00059	8.97	23.10	2.58x	
	008	C00073	11.41	25.56	2.24x	
	009	C00088	10.11	23.62	2.34x	
	010	C00101	10.10	22.71	2.25x	
	011	C00159	10.96	23.28	2.12x	
	214899-003	C00217	1.5 added	30.00	55.6x	20x of 2.78 C00165
	Blank	C1703	—	—	1x	
9/23 AMP	214897-001	C00091	10.99	22.67	2.06x	
	002	C00068	10.89	24.61	2.26x	
	003	C00065	10.94	23.75	2.17x	
	004	C00079	11.07	24.12	2.18x	
	005	C00110	11.38	24.21	2.13x	
	006	C00172	11.42	24.65	2.16x	
	007	C00077	11.31	23.97	2.12x	
	008	C00071	11.38	23.79	2.09x	
	009	C00062	11.79	24.91	2.11x	
	Blank	C1705	—	—	1x	

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Read and Understood By

Signed Date Signed Date

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~~Mapping~~ Date	Sample ID	Can ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23/09 AP	214897-005	C00014	1.5 added	30.0	42.6x	20x of 2.13 x C00110
↓	006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
Soo 9/26/09	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00058	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.13	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1703	—	—	1x	
Soo 10/6/09	214897-009	C00017	1.5 added	30.0 total	42.2x	20x of 2.11x can C00062
↓	214999-004	C00212	1.5 added	30.0 total	43.2x	20x of 2.16x can C00052
	215048-001	C00220	1.5 added	30.0 total	44.2x	20x of 2.21x can C00140
↓	BLANK	C1705	—	—	1x	
Soo 10/8/09	214999 -1	C00045	3.0 added	30.0 total	22.2x	10x of 2.22x can C00064
↓	-2	C00213	1.5 added	30.0 total	44.4x	20x of 2.22x can C00124
	BLANK	C00227	—	—	1x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Laboratory Job Number 214904

ANALYTICAL REPORT

Volatile Organics in Air GC

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M):	ug/L		

Field ID:	SMW-2-M-9Q3	Diln Fac:	3.110
Type:	SAMPLE	Sampled:	09/13/09
Lab ID:	214904-001	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	3.7	1.6	2.4	1.0	D2
C1-C2 as Ethane	ND	3.1	ND	3.8	D2
C2-C3 as Propane	ND	3.1	ND	5.6	D2
C3-C4 as n-Butane	ND	3.1	ND	7.4	D2
C4-C5 as n-Pentane	ND	3.1	ND	9.2	D2
C5-C6 as n-Hexane	ND	3.1	ND	11	D2
C6+ as n-Hexane	ND	3.1	ND	11	D2

Field ID:	P-32-9Q3	Diln Fac:	1.970
Type:	SAMPLE	Sampled:	09/13/09
Lab ID:	214904-002		

Analyte	Result	RL	Result (M)	RL	Analyzed	ADEQ Flags
Methane-TO3	2.0	0.99	1.3	0.65	09/28/09	D1
C1-C2 as Ethane	ND	2.0	ND	2.4	09/28/09	D1
C2-C3 as Propane	ND	2.0	ND	3.6	09/28/09	D1
C3-C4 as n-Butane	ND	2.0	ND	4.7	09/28/09	D1
C4-C5 as n-Pentane	ND	2.0	ND	5.8	09/28/09	D1
C5-C6 as n-Hexane	ND	2.0	ND	6.9	09/28/09	D1
C6+ as n-Hexane	29	2.0	100	6.9	09/29/09	D1

Field ID:	BSVE-INLET-9Q3	Diln Fac:	2.070
Type:	SAMPLE	Sampled:	09/13/09
Lab ID:	214904-003	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	6,600	1.0	4,300	0.68	D2
C1-C2 as Ethane	ND	2.1	ND	2.5	D2
C2-C3 as Propane	ND	2.1	ND	3.7	D2
C3-C4 as n-Butane	4.5	2.1	11	4.9	D2
C4-C5 as n-Pentane	37	2.1	110	6.1	D2
C5-C6 as n-Hexane	150	2.1	530	7.3	D2
C6+ as n-Hexane	300	2.1	1,100	7.3	D2

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M):	ug/L		

Field ID:	SMW-4-L-9Q3	Diln Fac:	2.210
Type:	SAMPLE	Sampled:	09/12/09
Lab ID:	214904-004	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	23,000	1.1	15,000	0.72	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	4.0	D1
C3-C4 as n-Butane	7.5	2.2	18	5.3	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.5	D1
C5-C6 as n-Hexane	ND	2.2	ND	7.8	D1
C6+ as n-Hexane	ND	2.2	ND	7.8	D1

Field ID:	SMW-4-M-9Q3	Diln Fac:	2.300
Type:	SAMPLE	Sampled:	09/12/09
Lab ID:	214904-005	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	4.1	1.2	2.7	0.75	D1
C1-C2 as Ethane	ND	2.3	ND	2.8	D1
C2-C3 as Propane	ND	2.3	ND	4.1	D1
C3-C4 as n-Butane	ND	2.3	ND	5.5	D1
C4-C5 as n-Pentane	ND	2.3	ND	6.8	D1
C5-C6 as n-Hexane	14	2.3	48	8.1	D1
C6+ as n-Hexane	18	2.3	62	8.1	D1

Field ID:	SMW-4-U-9Q3	Diln Fac:	2.190
Type:	SAMPLE	Sampled:	09/12/09
Lab ID:	214904-006	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	3.5	1.1	2.3	0.72	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	4.0	D1
C3-C4 as n-Butane	ND	2.2	ND	5.2	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.5	D1
C5-C6 as n-Hexane	ND	2.2	ND	7.7	D1
C6+ as n-Hexane	ND	2.2	ND	7.7	D1

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M):	ug/L		

Field ID:	BV-3N-9Q3	Diln Fac:	2.090
Type:	SAMPLE	Sampled:	09/12/09
Lab ID:	214904-007	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	1,000	1.0	670	0.69	D1
C1-C2 as Ethane	ND	2.1	ND	2.6	D1
C2-C3 as Propane	ND	2.1	ND	3.8	D1
C3-C4 as n-Butane	ND	2.1	ND	5.0	D1
C4-C5 as n-Pentane	11	2.1	33	6.2	D1
C5-C6 as n-Hexane	71	2.1	250	7.4	D1
C6+ as n-Hexane	160	2.1	560	7.4	D1

Field ID:	BV-19N-9Q3	Diln Fac:	2.080
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-008	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	18,000	1.0	12,000	0.68	D1
C1-C2 as Ethane	ND	2.1	ND	2.6	D1
C2-C3 as Propane	ND	2.1	ND	3.8	D1
C3-C4 as n-Butane	ND	2.1	ND	4.9	D1
C4-C5 as n-Pentane	10	2.1	30	6.1	D1
C5-C6 as n-Hexane	91	2.1	320	7.3	D1
C6+ as n-Hexane	350	2.1	1,200	7.3	D1

Field ID:	BSVE-SVM-9Q3-008	Diln Fac:	2.220
Type:	SAMPLE	Sampled:	09/12/09
Lab ID:	214904-009	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	23,000	1.1	15,000	0.73	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	4.0	D1
C3-C4 as n-Butane	7.5	2.2	18	5.3	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.6	D1
C5-C6 as n-Hexane	ND	2.2	ND	7.8	D1
C6+ as n-Hexane	ND	2.2	ND	7.8	D1

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M):	ug/L		

Field ID:	BV-1N-9Q3	Diln Fac:	2.180
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-010		

Analyte	Result	RL	Result (M)	RL	Analyzed	ADEQ Flags
Methane-TO3	260	1.1	170	0.72	09/28/09	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	09/28/09	D1
C2-C3 as Propane	ND	2.2	ND	3.9	09/28/09	D1
C3-C4 as n-Butane	ND	2.2	ND	5.2	09/28/09	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.4	09/28/09	D1
C5-C6 as n-Hexane	12	2.2	42	7.7	09/28/09	D1
C6+ as n-Hexane	12	2.2	43	7.7	09/29/09	D1

Field ID:	BV-10N-9Q3	Diln Fac:	2.170
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-011	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	8,200	1.1	5,300	0.71	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	3.9	D1
C3-C4 as n-Butane	ND	2.2	ND	5.2	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.4	D1
C5-C6 as n-Hexane	34	2.2	120	7.6	D1
C6+ as n-Hexane	190	2.2	670	7.6	D1

Field ID:	ASE-46A-9Q3	Diln Fac:	2.160
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-012	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	170	1.1	110	0.71	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	3.9	D1
C3-C4 as n-Butane	ND	2.2	ND	5.1	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.4	D1
C5-C6 as n-Hexane	24	2.2	85	7.6	D1
C6+ as n-Hexane	210	2.2	740	7.6	D1

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M):	ug/L		

Field ID:	BV-9N-9Q3	Diln Fac:	2.100
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-013	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	480	1.1	320	0.69	D1
C1-C2 as Ethane	ND	2.1	ND	2.6	D1
C2-C3 as Propane	ND	2.1	ND	3.8	D1
C3-C4 as n-Butane	ND	2.1	ND	5.0	D1
C4-C5 as n-Pentane	ND	2.1	ND	6.2	D1
C5-C6 as n-Hexane	35	2.1	120	7.4	D1
C6+ as n-Hexane	140	2.1	510	7.4	D1

Field ID:	BV-13N-9Q3	Diln Fac:	2.110
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-014	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	17	1.1	11	0.69	D1
C1-C2 as Ethane	ND	2.1	ND	2.6	D1
C2-C3 as Propane	ND	2.1	ND	3.8	D1
C3-C4 as n-Butane	ND	2.1	ND	5.0	D1
C4-C5 as n-Pentane	ND	2.1	ND	6.2	D1
C5-C6 as n-Hexane	18	2.1	64	7.4	D1
C6+ as n-Hexane	62	2.1	220	7.4	D1

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513933	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	ND	0.50	ND	0.33	
C1-C2 as Ethane	ND	1.0	ND	1.2	
C2-C3 as Propane	ND	1.0	ND	1.8	
C3-C4 as n-Butane	ND	1.0	ND	2.4	
C4-C5 as n-Pentane	ND	1.0	ND	3.0	
C5-C6 as n-Hexane	ND	1.0	ND	3.5	
C6+ as n-Hexane	ND	1.0	ND	3.5	

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Analysis of Reformed Gas

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M) :	ug/L		

Field ID:	BSVE-INLET-9Q3	Diln Fac:	2.070
Type:	SAMPLE	Sampled:	09/13/09
Lab ID:	214904-003	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	58,000	4,100	100,000	7,500	D2
Oxygen	120,000	4,100	160,000	5,400	D2

Field ID:	BV-3N-9Q3	Diln Fac:	2.090
Type:	SAMPLE	Sampled:	09/12/09
Lab ID:	214904-007	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	58,000	4,200	100,000	7,500	D1
Oxygen	140,000	4,200	180,000	5,500	D1

Field ID:	BV-19N-9Q3	Diln Fac:	2.080
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-008	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	67,000	4,200	120,000	7,500	D1
Oxygen	83,000	4,200	110,000	5,400	D1

Field ID:	BV-1N-9Q3	Diln Fac:	2.180
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-010	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	56,000	4,400	100,000	7,800	D1
Oxygen	120,000	4,400	150,000	5,700	D1

Field ID:	BV-10N-9Q3	Diln Fac:	2.170
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-011	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	86,000	4,300	160,000	7,800	D1
Oxygen	ND	4,300	ND	5,700	D1

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Analysis of Reformed Gas

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Matrix:	Air	Batch#:	155375
Units:	ppmv	Received:	09/15/09
Units (M) :	ug/L		

Field ID:	ASE-46A-9Q3	Diln Fac:	2.160
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-012	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	24,000	4,300	44,000	7,800	D1
Oxygen	170,000	4,300	220,000	5,700	D1

Field ID:	BV-9N-9Q3	Diln Fac:	2.100
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-013	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	35,000	4,200	63,000	7,600	D1
Oxygen	150,000	4,200	200,000	5,500	D1

Field ID:	BV-13N-9Q3	Diln Fac:	2.110
Type:	SAMPLE	Sampled:	09/11/09
Lab ID:	214904-014	Analyzed:	09/29/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	47,000	4,200	84,000	7,600	D1
Oxygen	150,000	4,200	190,000	5,500	D1

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513933	Analyzed:	09/28/09

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	ND	2,000	ND	3,600	
Oxygen	ND	2,000	ND	2,600	

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Analyzed:	09/28/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513934

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Methane-TO3	100.0	101.9	102	70-130	
C1-C2 as Ethane	100.0	100.7	101	70-130	
C2-C3 as Propane	100.0	98.45	98	70-130	
C3-C4 as n-Butane	100.0	100.1	100	70-130	
C4-C5 as n-Pentane	100.0	102.0	102	70-130	
C5-C6 as n-Hexane	100.0	100.8	101	70-130	

Type: BSD Lab ID: QC513935

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Methane-TO3	100.0	95.78	96	70-130	6	20	
C1-C2 as Ethane	100.0	94.76	95	70-130	6	20	
C2-C3 as Propane	100.0	92.67	93	70-130	6	20	
C3-C4 as n-Butane	100.0	94.07	94	70-130	6	20	
C4-C5 as n-Pentane	100.0	95.89	96	70-130	6	20	
C5-C6 as n-Hexane	100.0	94.92	95	70-130	6	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Analysis of Reformed Gas

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Field ID:	SMW-2-M-9Q3	Units (M) :	ug/L
Type:	SDUP	Diln Fac:	3.110
MSS Lab ID:	214904-001	Batch#:	155375
Lab ID:	QC513936	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Carbon Dioxide	33,700	33,630	6,220	60,540	11,200	0	30	D1
Oxygen	161,700	160,600	6,220	210,200	8,141	1	30	D1

RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Field ID:	SMW-2-M-9Q3	Units (M):	ug/L
Type:	SDUP	Diln Fac:	3.110
MSS Lab ID:	214904-001	Batch#:	155375
Lab ID:	QC513936	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result		RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Methane-TO3	3.677	3.534		1.555	2.318	1.020	4	30	D1
C1-C2 as Ethane	<3.110	ND		3.110	ND	3.825	NC	30	D1
C2-C3 as Propane	<3.110	ND		3.110	ND	5.609	NC	30	D1
C3-C4 as n-Butane	<3.110	ND		3.110	ND	7.393	NC	30	D1
C4-C5 as n-Pentane	<3.110	ND		3.110	ND	9.177	NC	30	D1
C5-C6 as n-Hexane	<3.110	ND		3.110	ND	10.96	NC	30	D1
C6+ as n-Hexane	<3.110	ND		3.110	ND	10.96	NC	30	D1

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Analysis of Reformed Gas

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513938	Batch#:	155375
Matrix:	Air	Analyzed:	09/28/09
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Carbon Dioxide	10,000	10,010	100	70-130	
Oxygen	10,000	9,772	98	70-130	

Curtis & Tompkins, Ltd.

Batch QC Report

Analysis of Reformed Gas

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Field ID:	BSVE-INLET-9Q3	Units (M) :	ug/L
Type:	SDUP	Diln Fac:	2.070
MSS Lab ID:	214904-003	Batch#:	155375
Lab ID:	QC513939	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Carbon Dioxide	57,780	57,690	4,140	103,800	7,452	0	30	D1
Oxygen	120,100	119,500	4,140	156,400	5,418	1	30	D1

RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214904	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Field ID:	BSVE-INLET-9Q3	Units (M):	ug/L
Type:	SDUP	Diln Fac:	2.070
MSS Lab ID:	214904-003	Batch#:	155375
Lab ID:	QC513939	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Methane-TO3	6,593	6,567	1.035	4,308	0.6790	0	30	D1
C1-C2 as Ethane	<2.070	ND	2.070	ND	2.546	NC	30	D1
C2-C3 as Propane	<2.070	ND	2.070	ND	3.734	NC	30	D1
C3-C4 as n-Butane	4.480	4.155	2.070	9.877	4.921	8	30	D1
C4-C5 as n-Pentane	37.04	36.95	2.070	109.0	6.108	0	30	D1
C5-C6 as n-Hexane	151.2	151.0	2.070	532.2	7.296	0	30	D1
C6+ as n-Hexane	298.5	365.1	2.070	1,287	7.296	20	30	D1

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Data File C:\CHEM32\1\DATA\092809\271_008.D
Sample Name: mss,214904-001,155375,3.11

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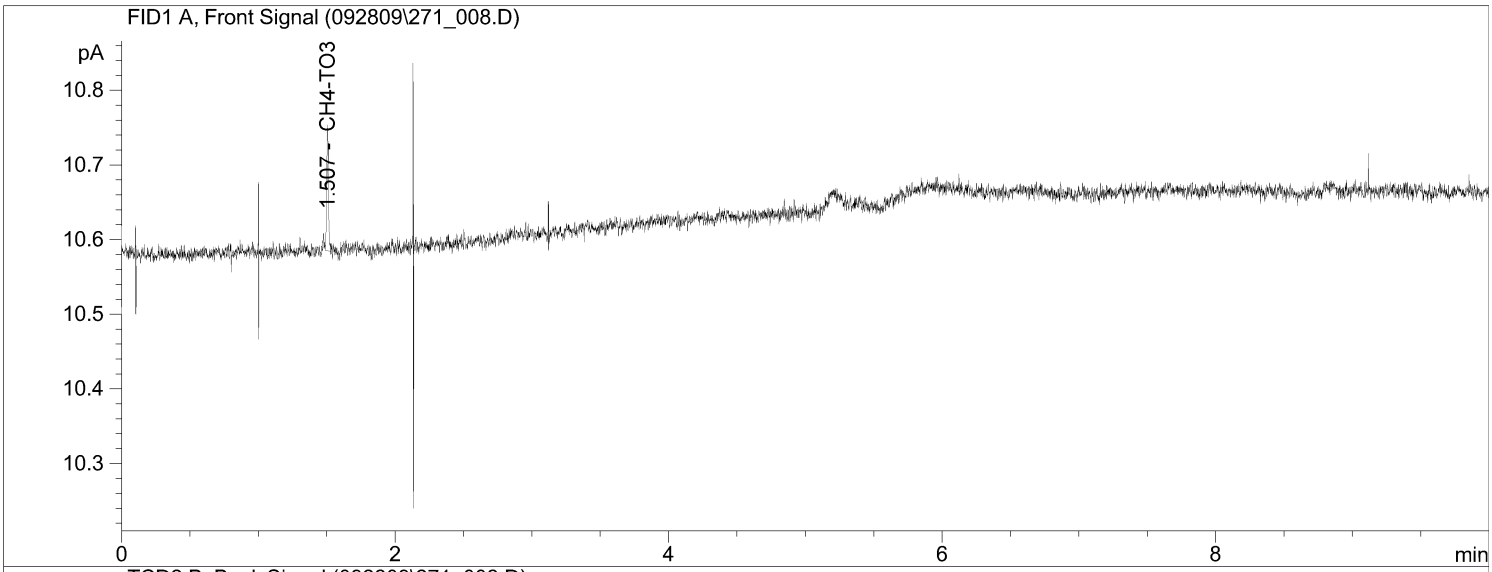
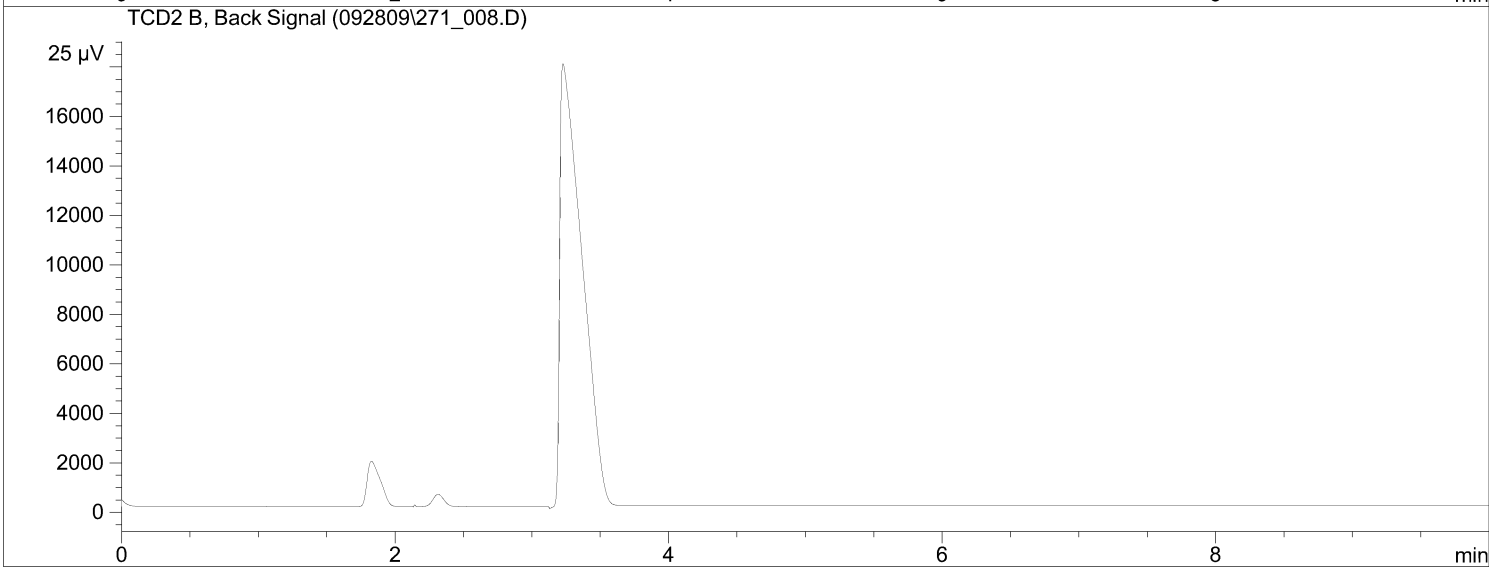
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 01:00:28 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/28/2009 12:58:01 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_012.D
Sample Name: 214904-002,155375,1.97

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Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 02:31:12 PM
Inj Volume : Manually
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(modified after loading)
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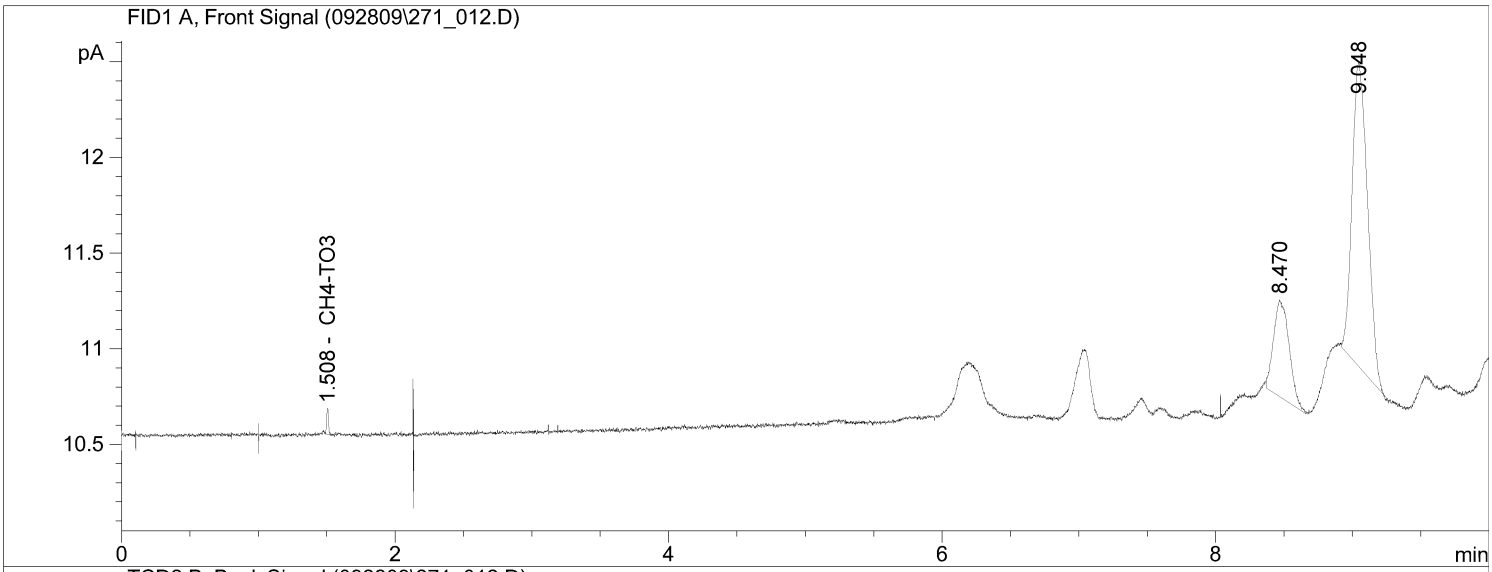

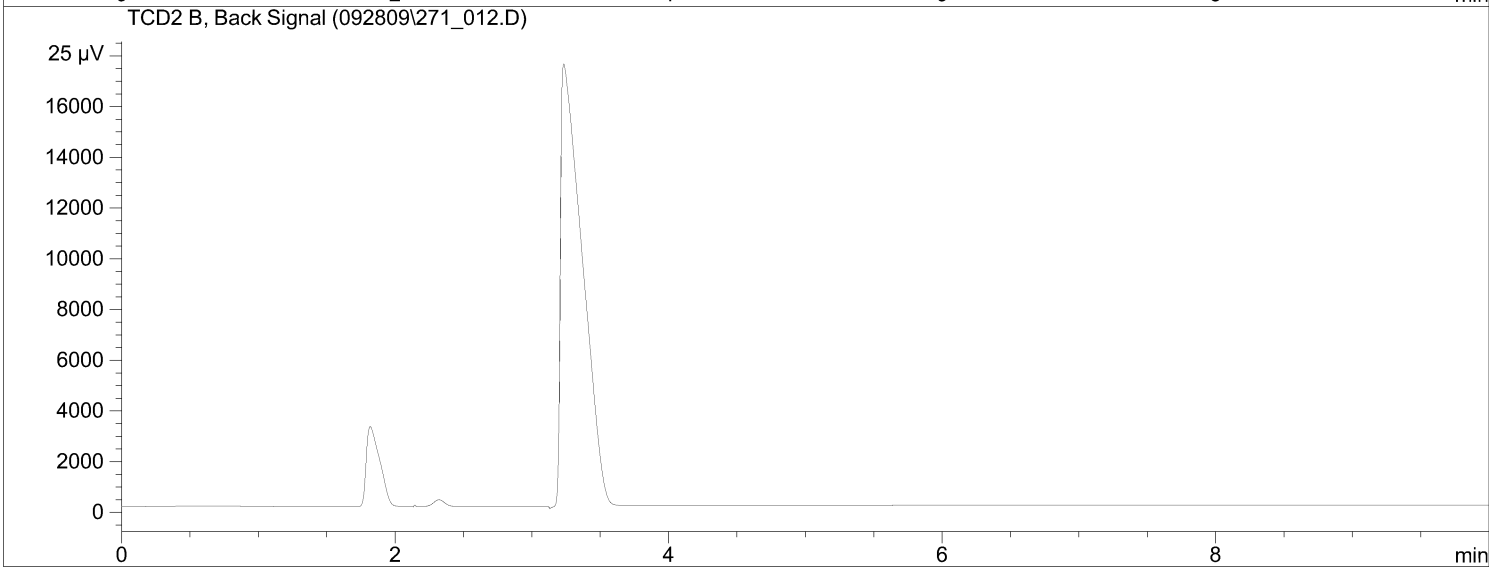

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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_010.D
Sample Name: mss,214904-003,155375,2.07

==========
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Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 01:44:57 PM
Inj Volume : Manually
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Last changed : 9/28/2009 01:44:57 PM by GC28 RGA
(modified after loading)
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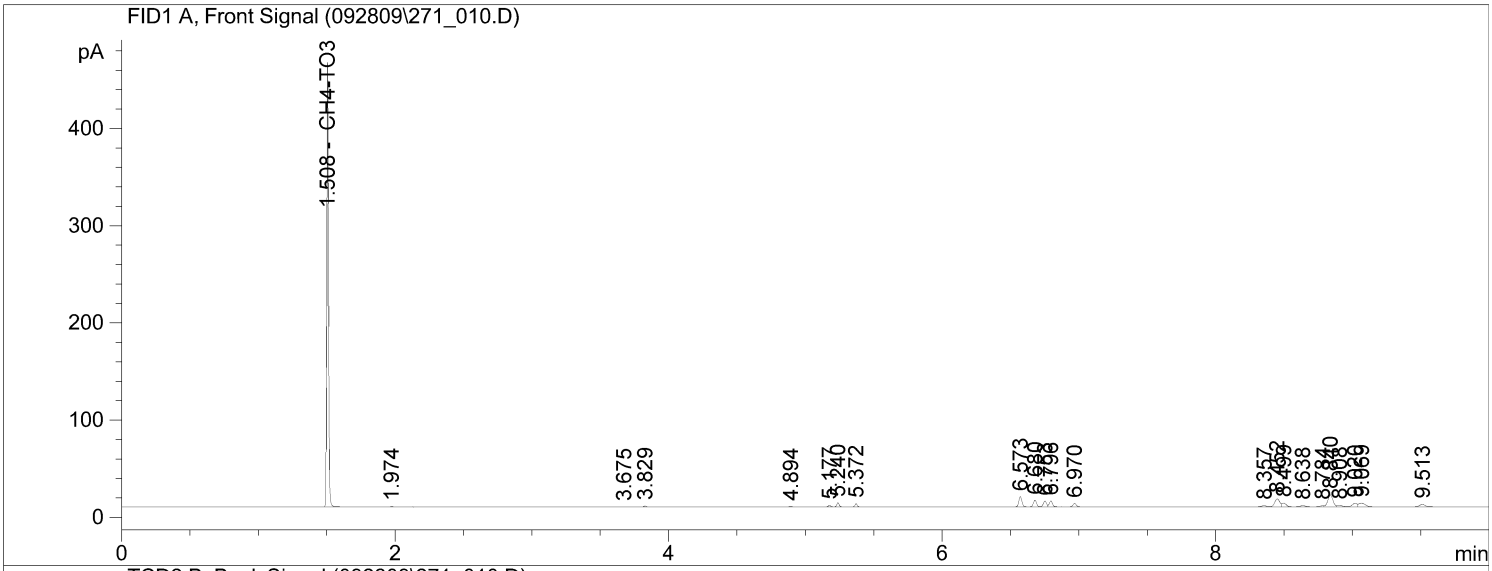
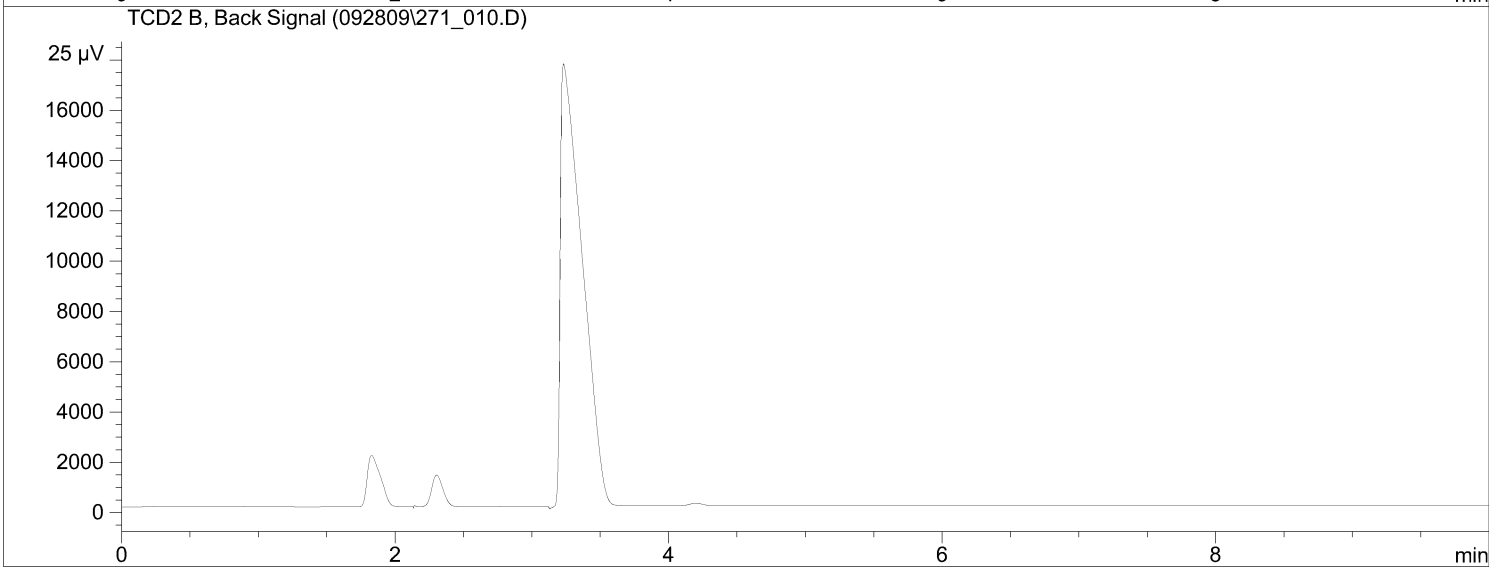
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_016.D
Sample Name: 214904-004,155375,2.21

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Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 04:08:02 PM
Inj Volume : Manually
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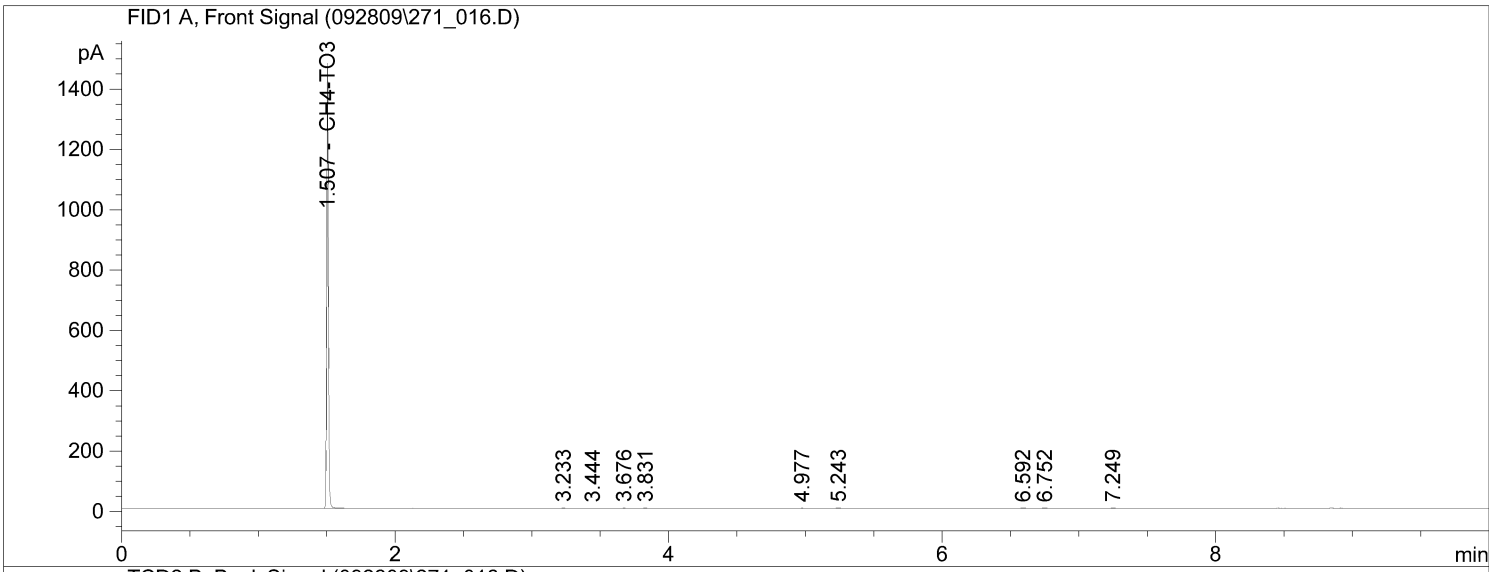
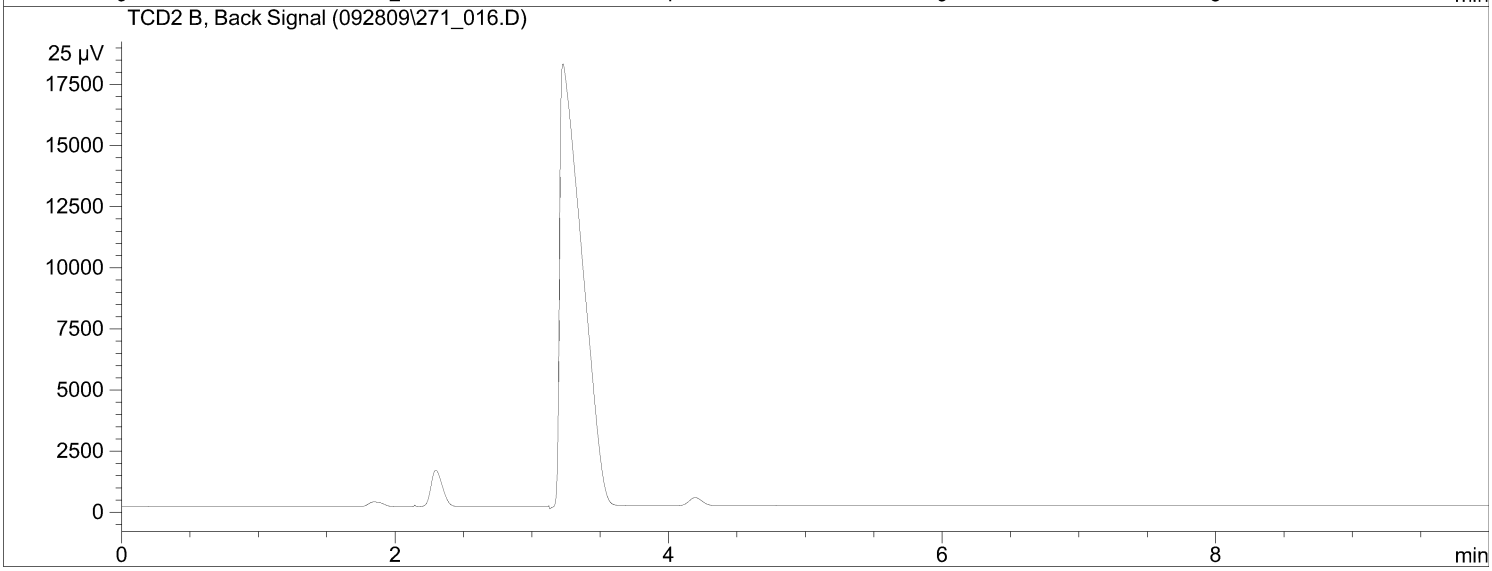
Last changed : 9/28/2009 04:08:01 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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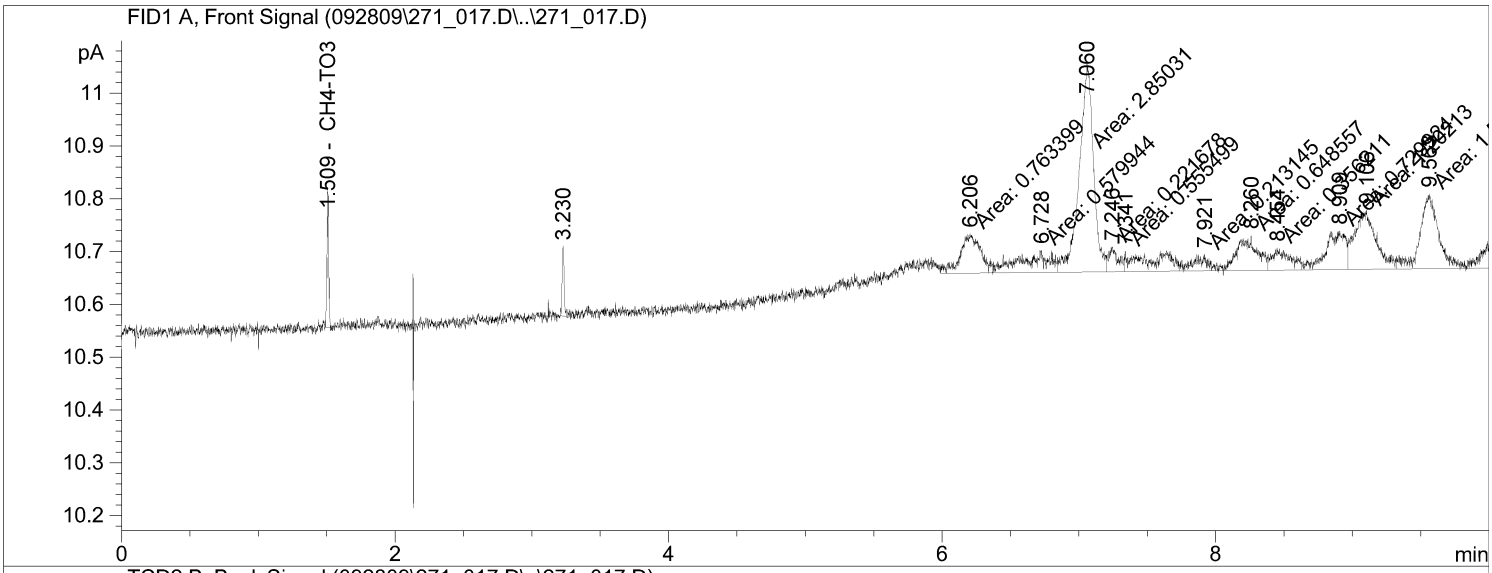
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

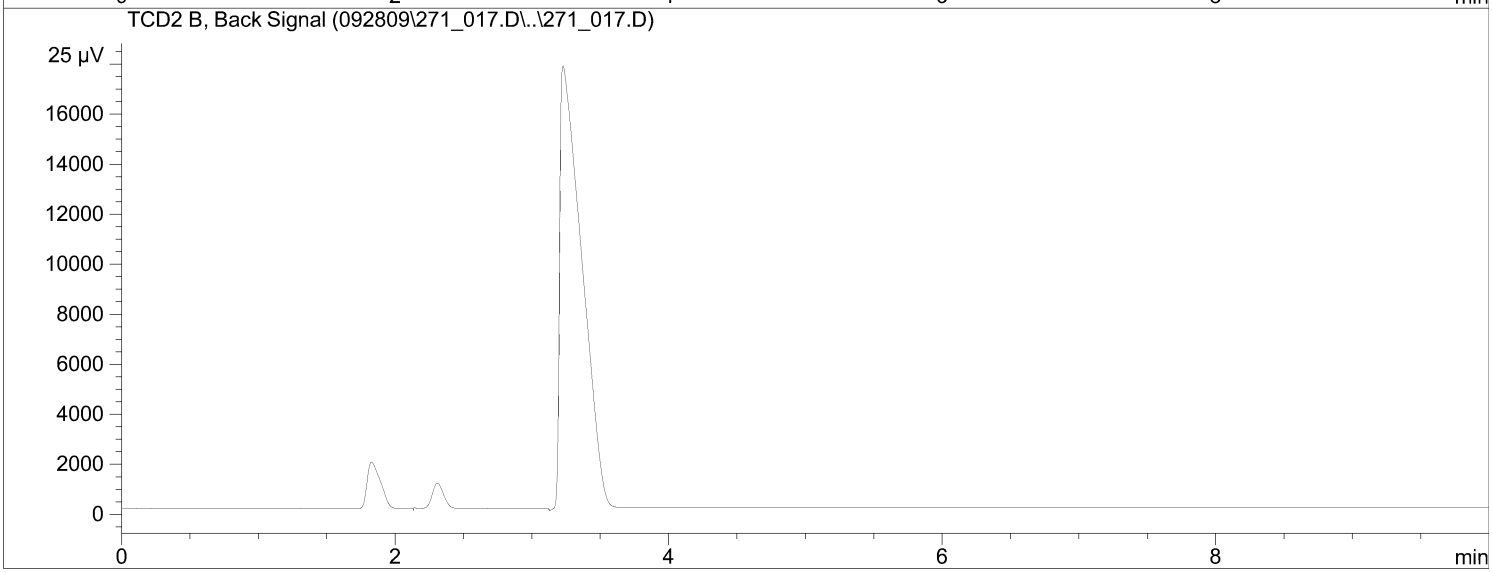
Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_017.D\..\271_017.D
Sample Name: 214904-005,155375,2.30

==========

Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 04:25:52 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/28/2009 04:25:51 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA
(Results are from a previously saved Batch)





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External Standard Report

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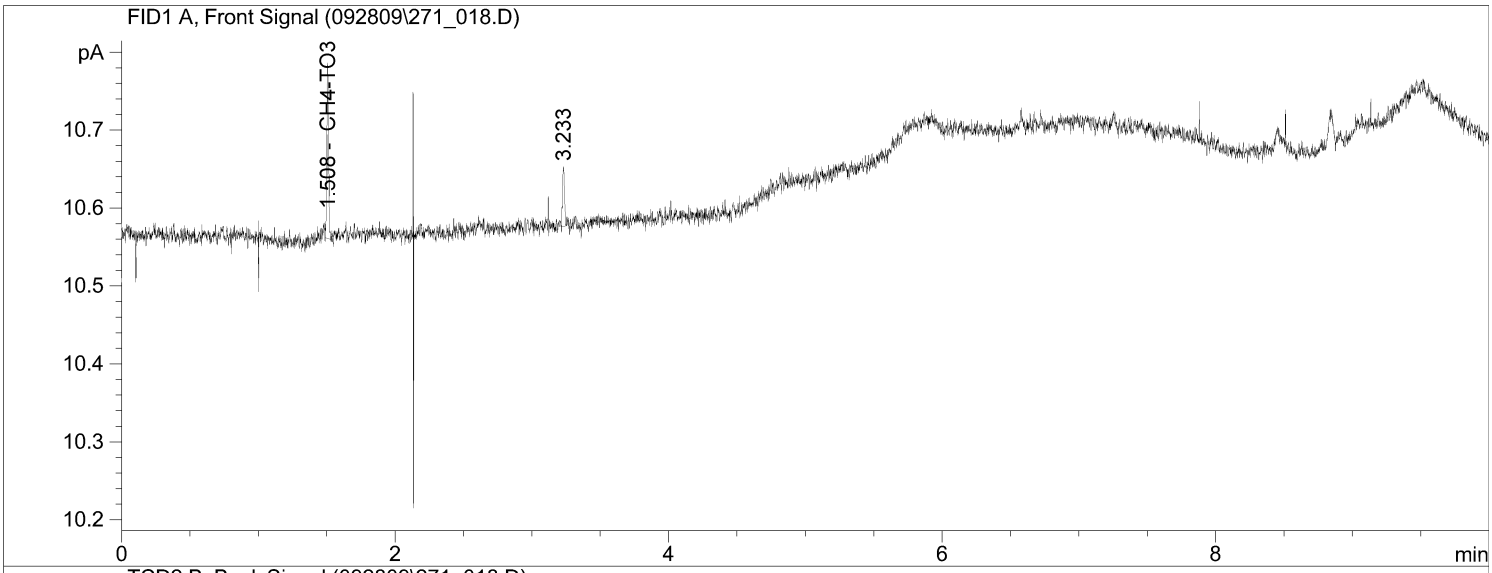
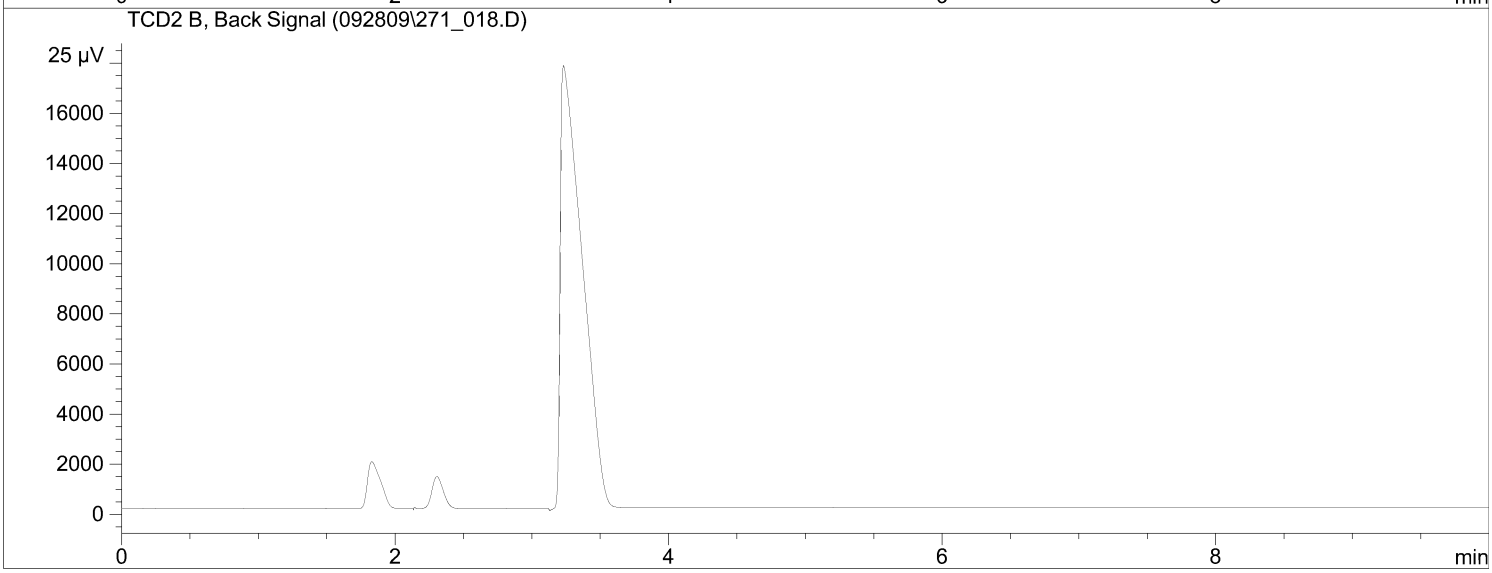
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092809\271_018.D
Sample Name: 214904-006,155375,2.19

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 04:46:55 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/28/2009 04:40:56 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/28/2009 05:09:33 PM by GC28 RGA
(modified after loading)





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External Standard Report
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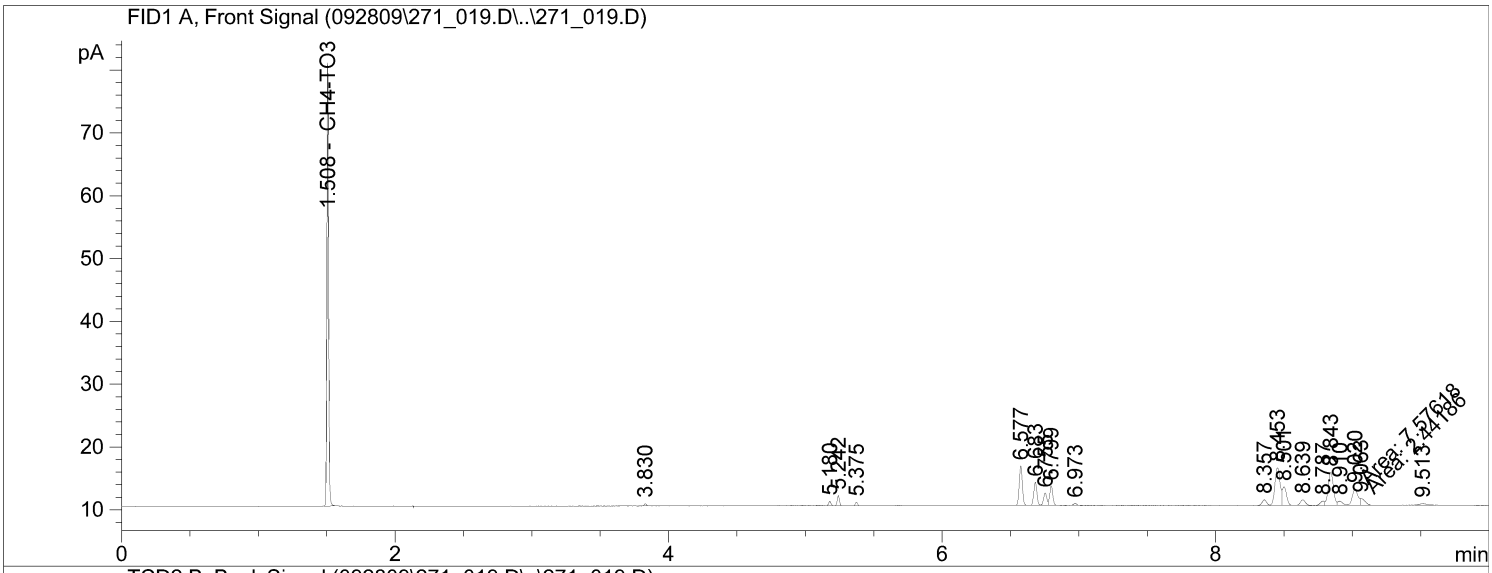
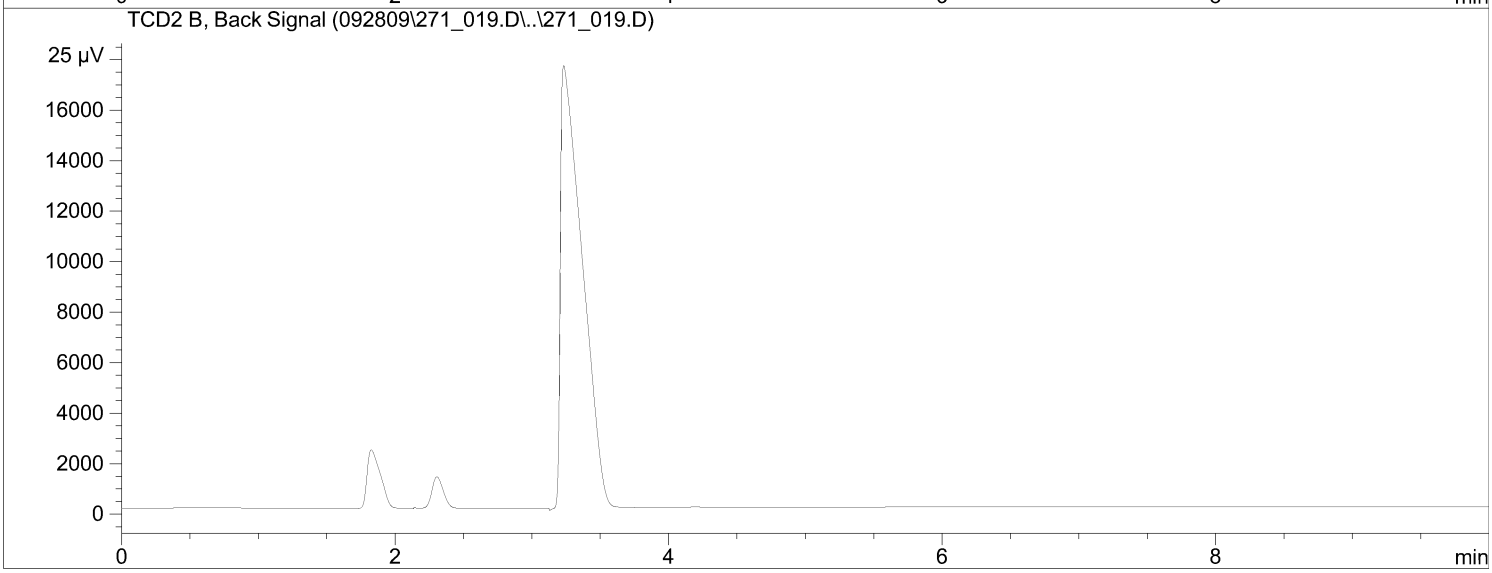
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092809\271_019.D\..\271_019.D
Sample Name: 214904-007,155375,2.09

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 05:08:31 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/28/2009 05:02:00 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA
(Results are from a previously saved Batch)





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External Standard Report
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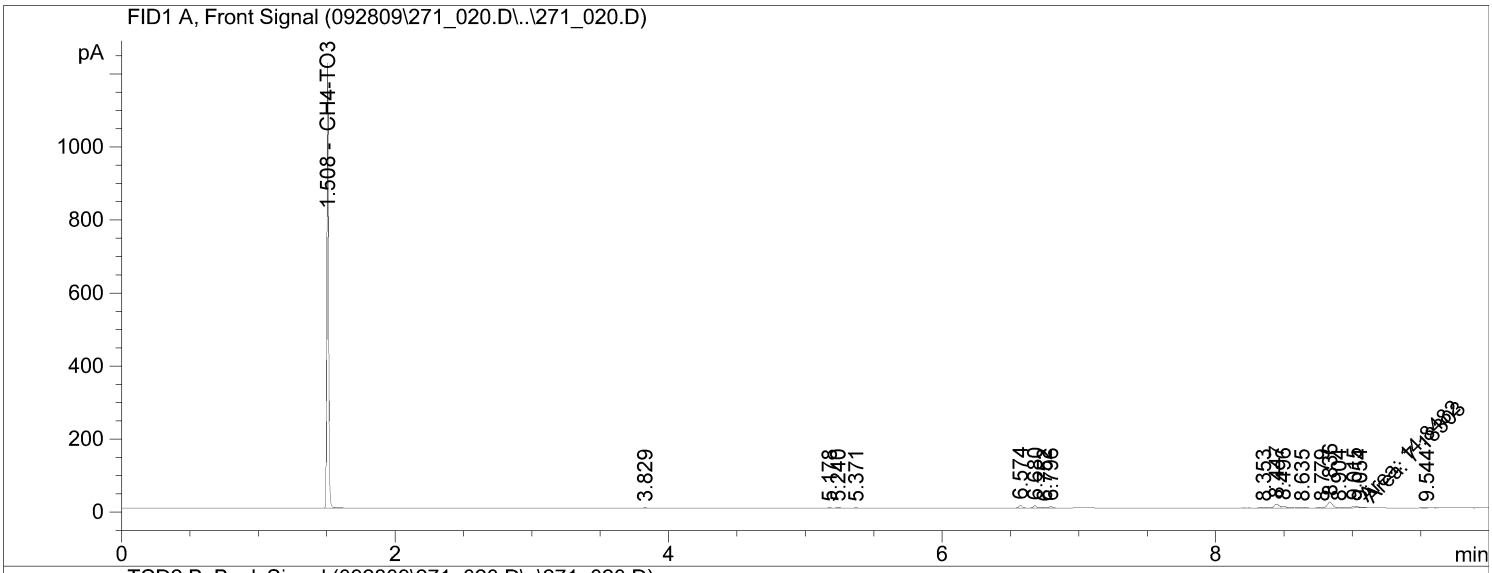
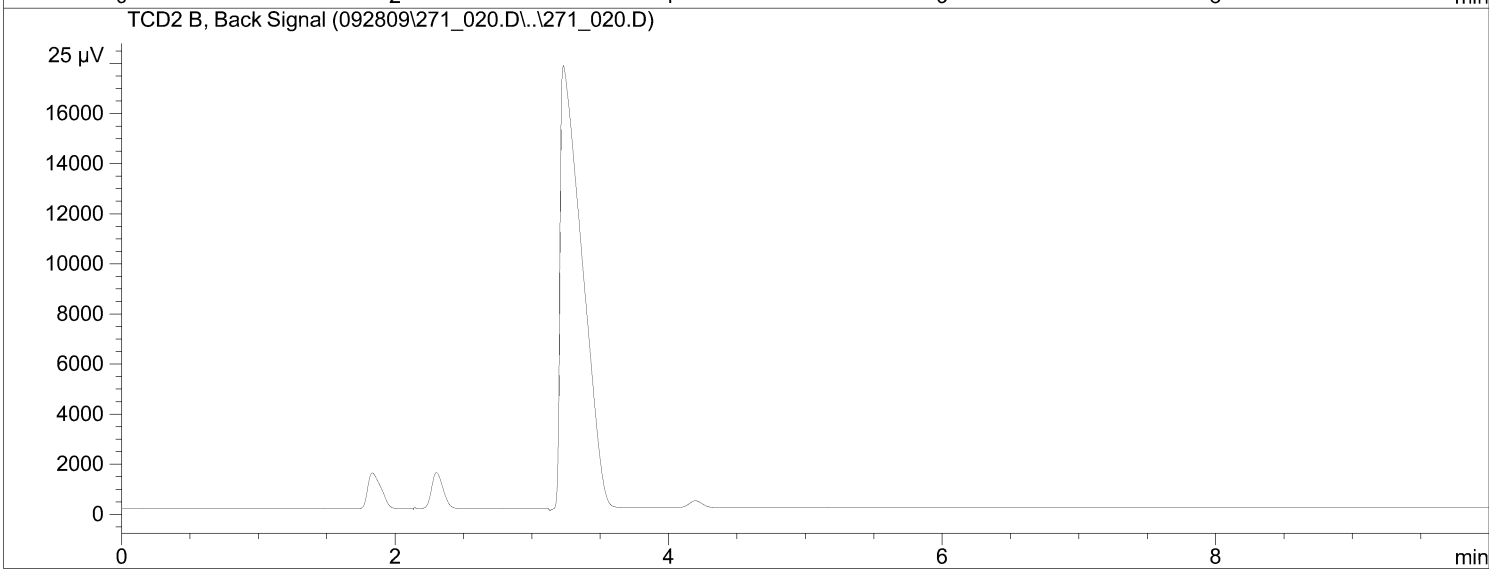
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092809\271_020.D\..\271_020.D
Sample Name: 214904-008,155375,2.08

==========

Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 05:27:29 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/28/2009 05:27:28 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA
(Results are from a previously saved Batch)





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External Standard Report

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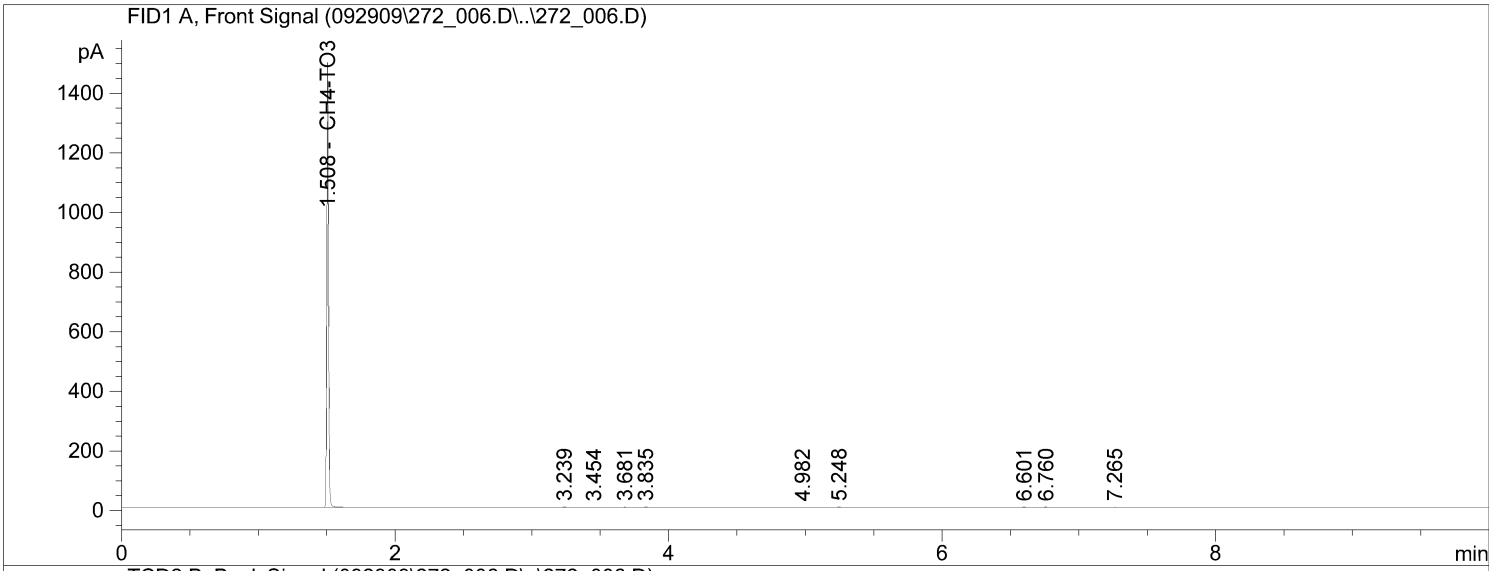
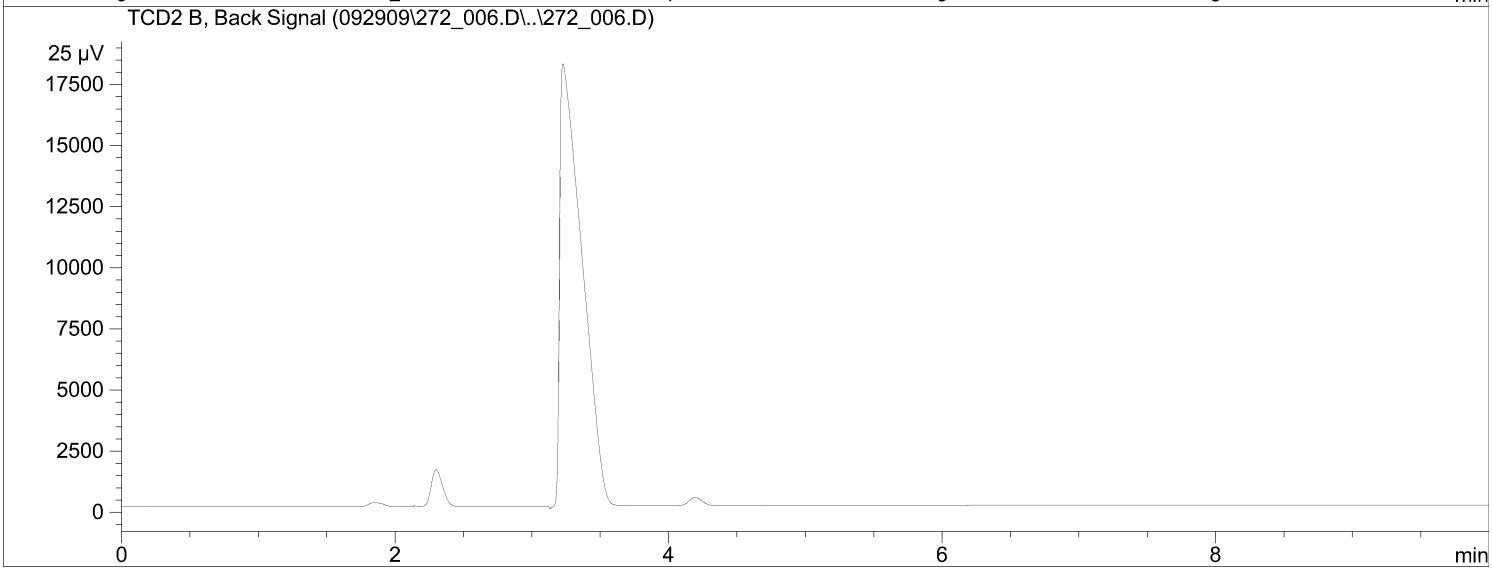
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092909\272_006.D\..\272_006.D
Sample Name: 214904-009,155375,2.22

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 09:41:47 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 09:41:45 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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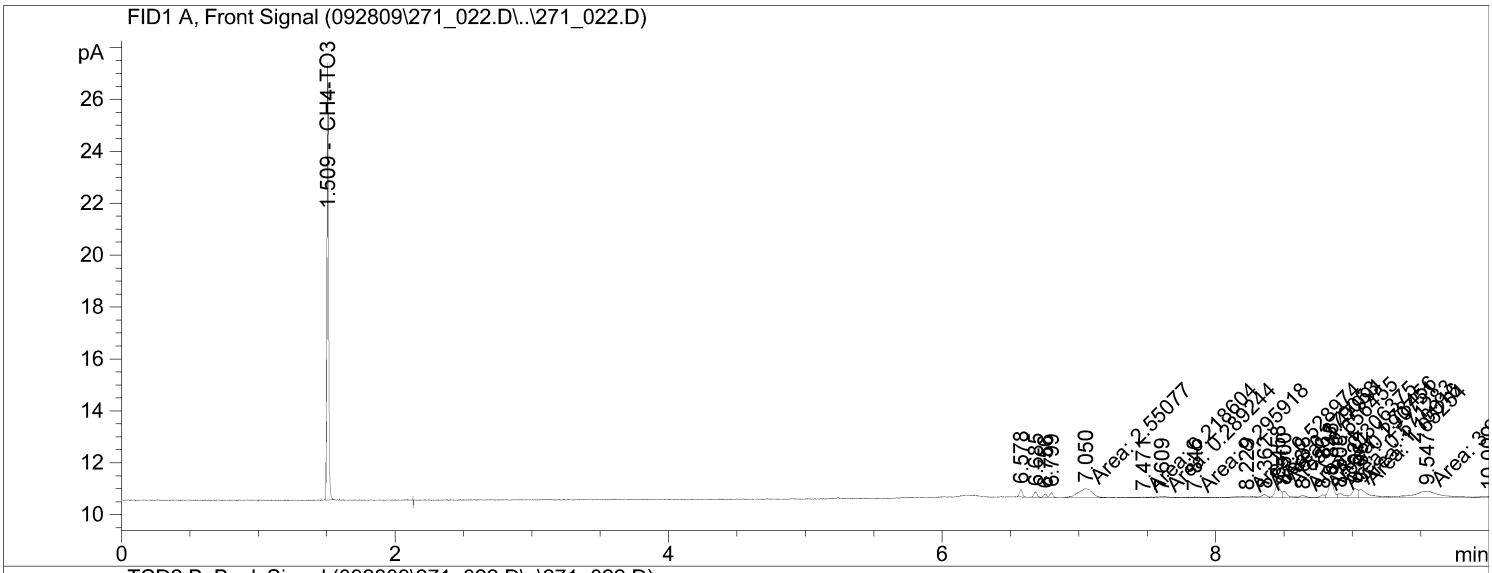
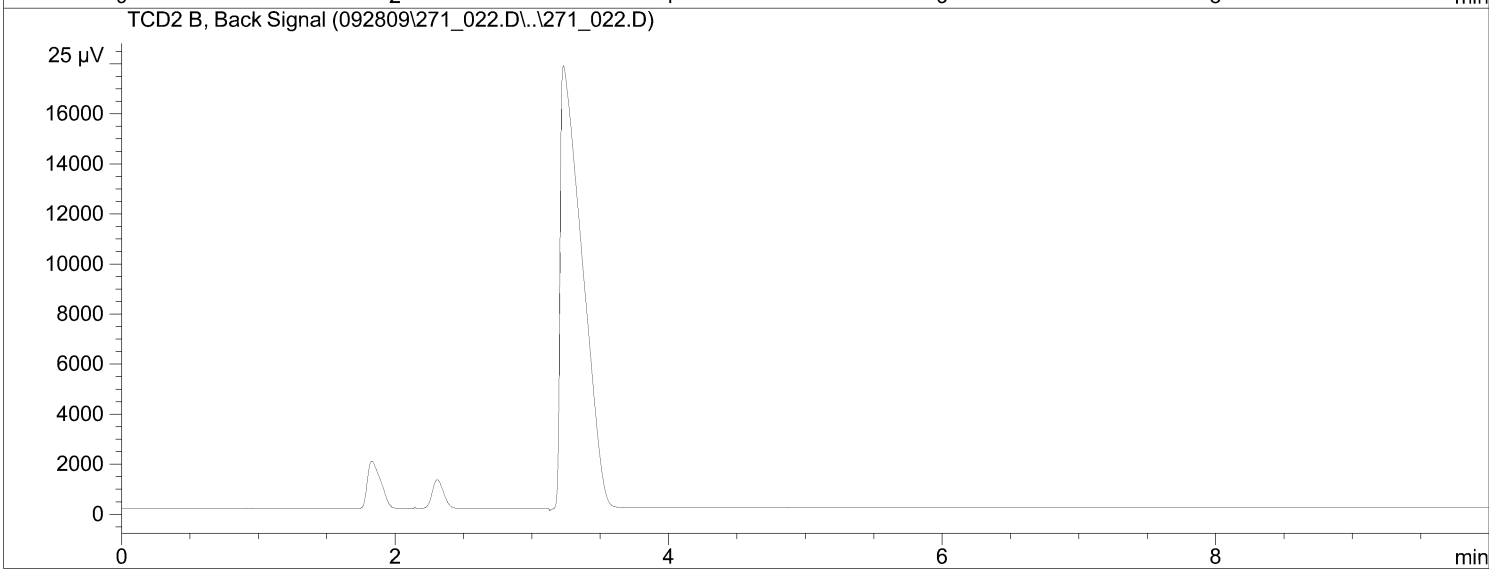
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_022.D\..\271_022.D
Sample Name: 214904-010,155375,2.18

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 06:08:16 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/28/2009 06:02:51 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA
(Results are from a previously saved Batch)





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External Standard Report
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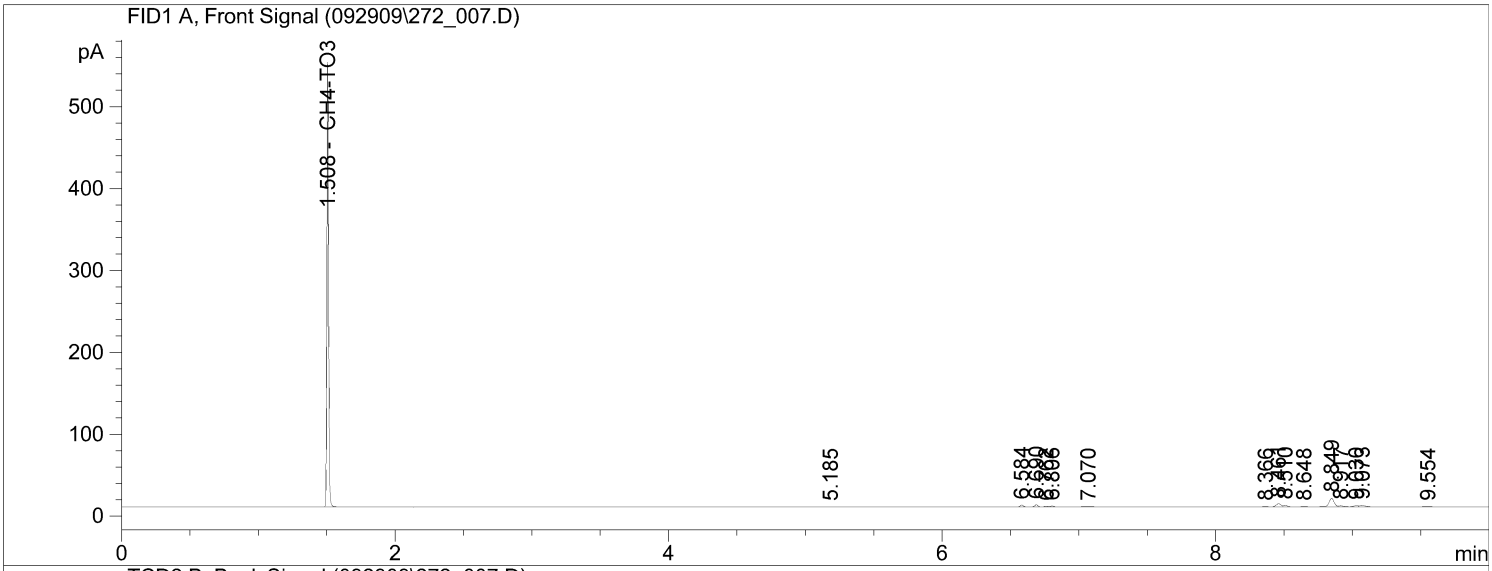
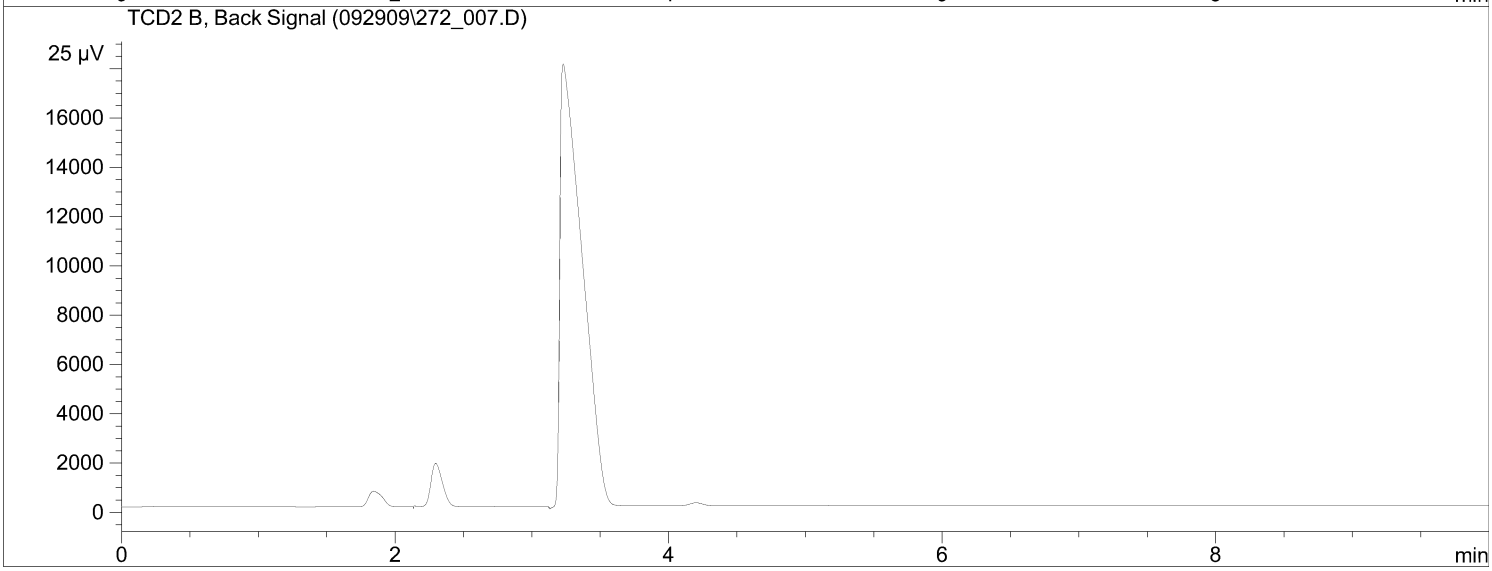
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092909\272_007.D
Sample Name: 214904-011,155375,2.17

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 10:01:41 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 10:01:39 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA





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External Standard Report
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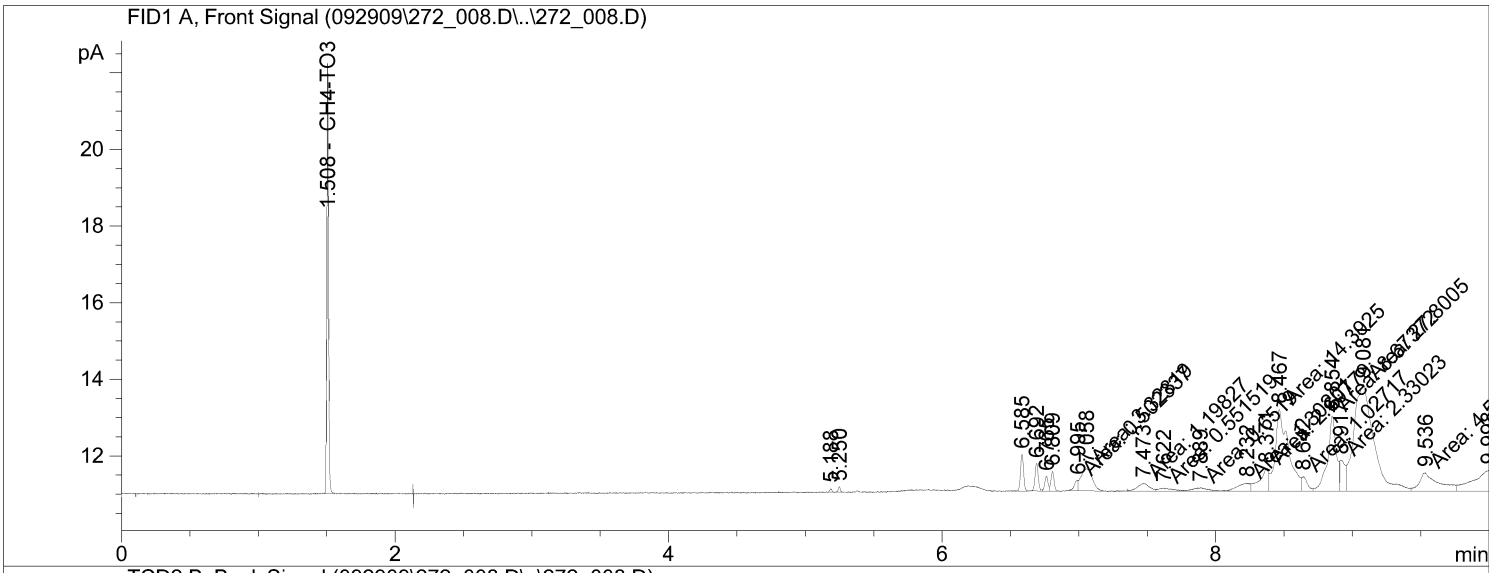
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

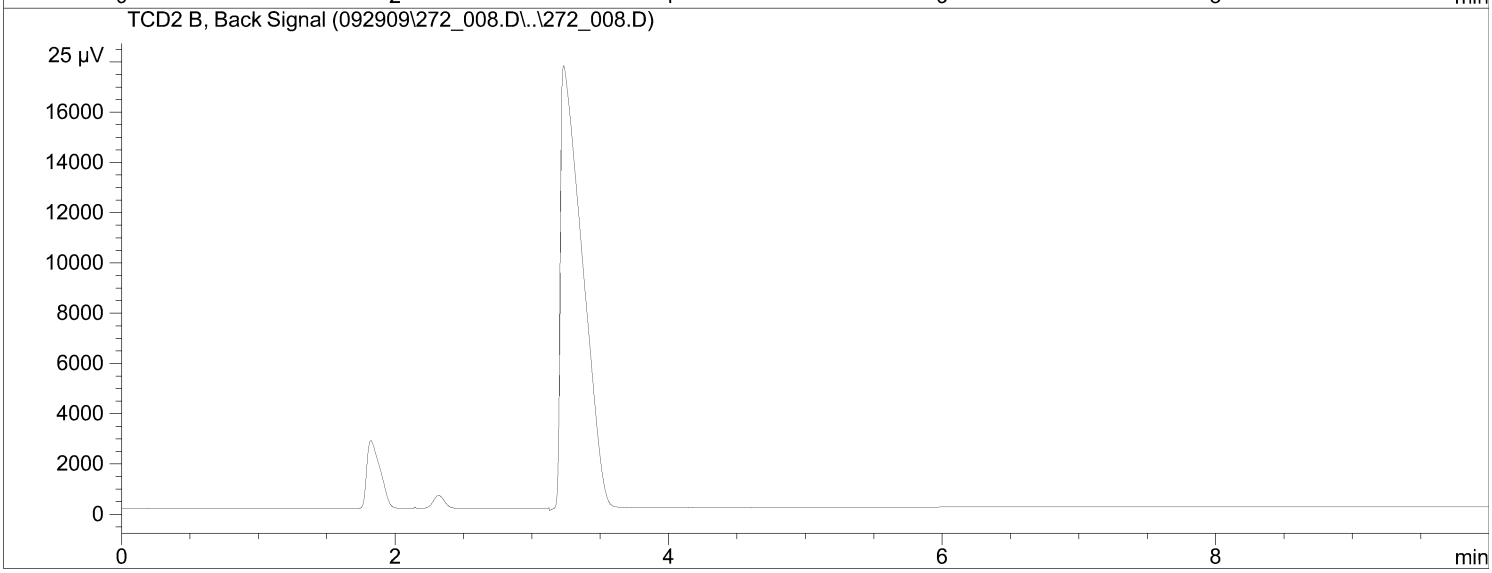
Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092909\272_008.D\..\272_008.D
Sample Name: 214904-012,155375,2.16

==========

Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 10:27:01 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 10:27:00 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA
(Results are from a previously saved Batch)





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External Standard Report

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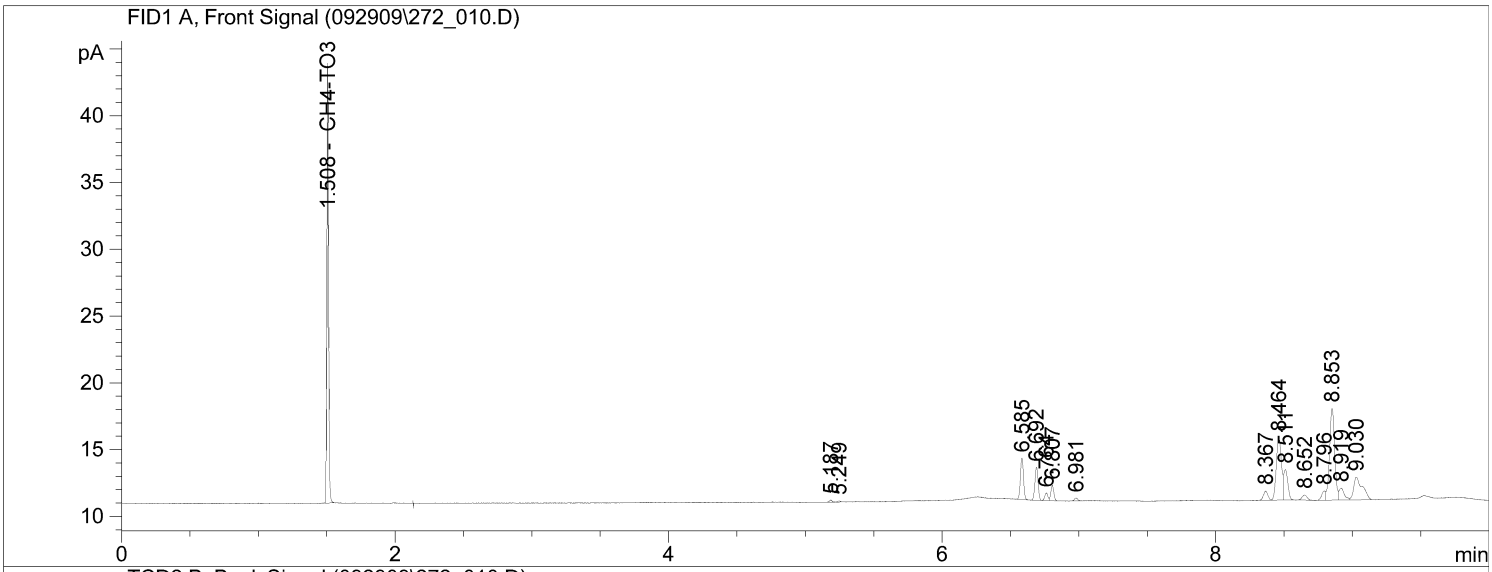
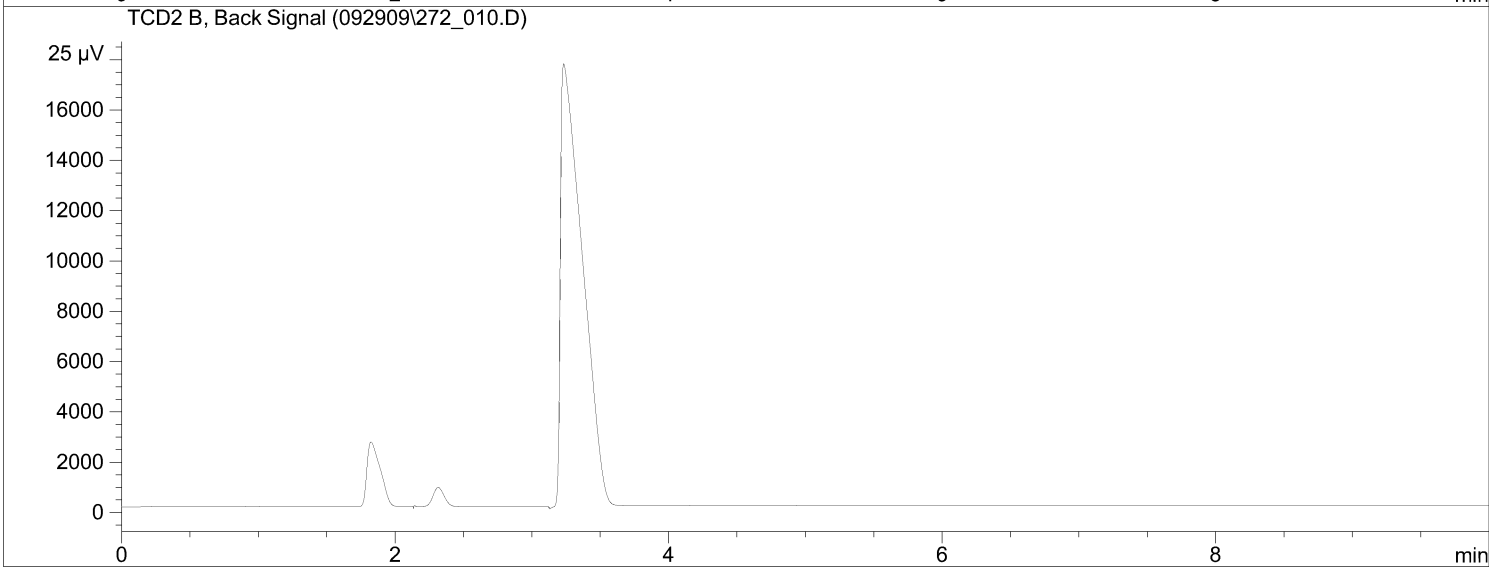
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092909\272_010.D
Sample Name: 214904-013,155375,2.10

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 11:20:27 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 11:14:32 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA





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External Standard Report
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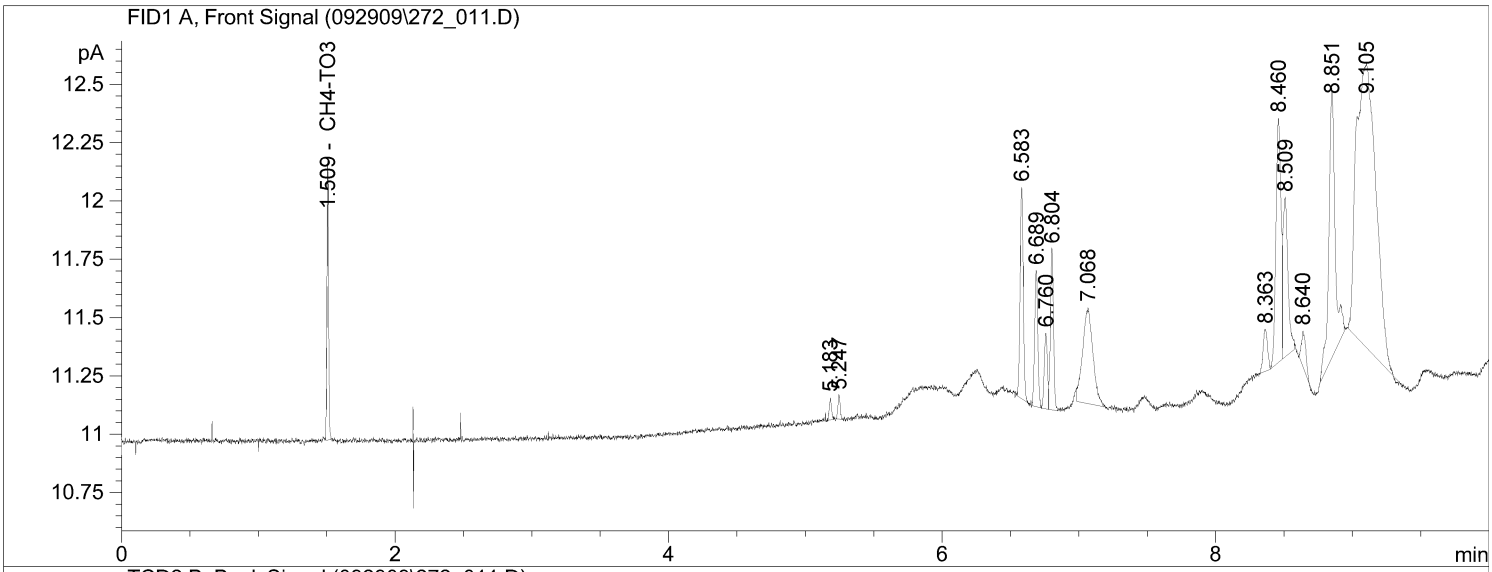
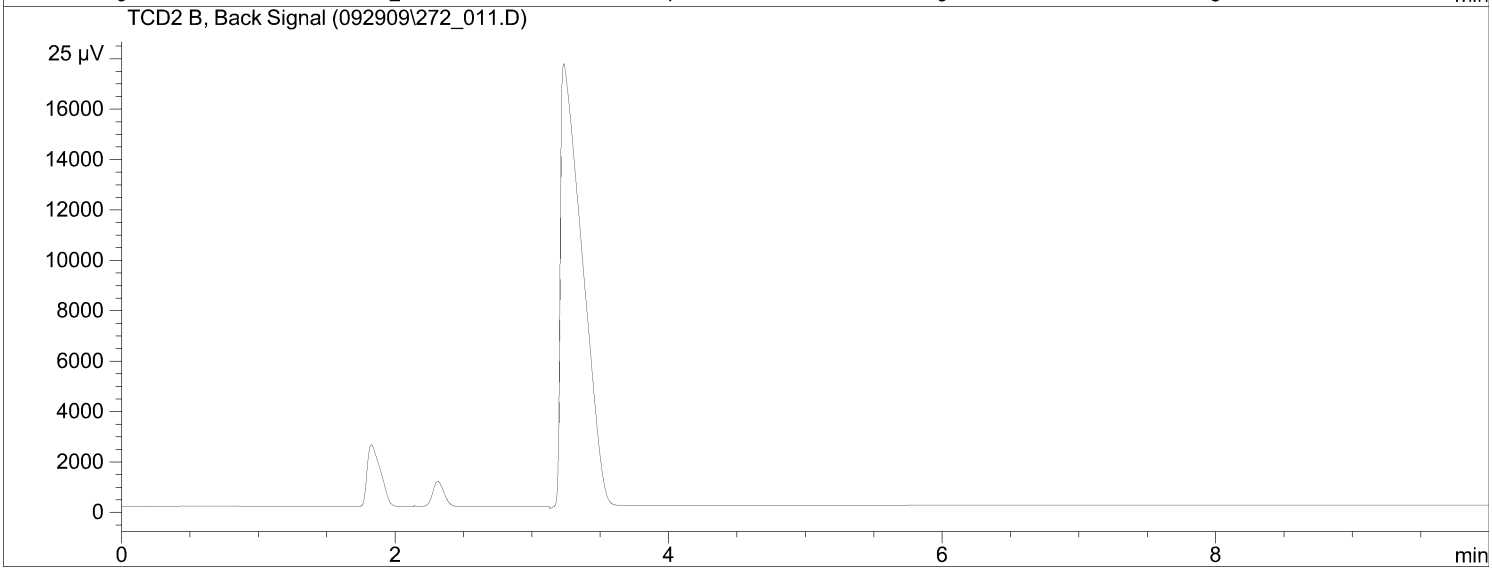
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092909\272_011.D
Sample Name: 214904-014,155375,2.11

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 11:39:00 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 11:38:59 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA





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External Standard Report
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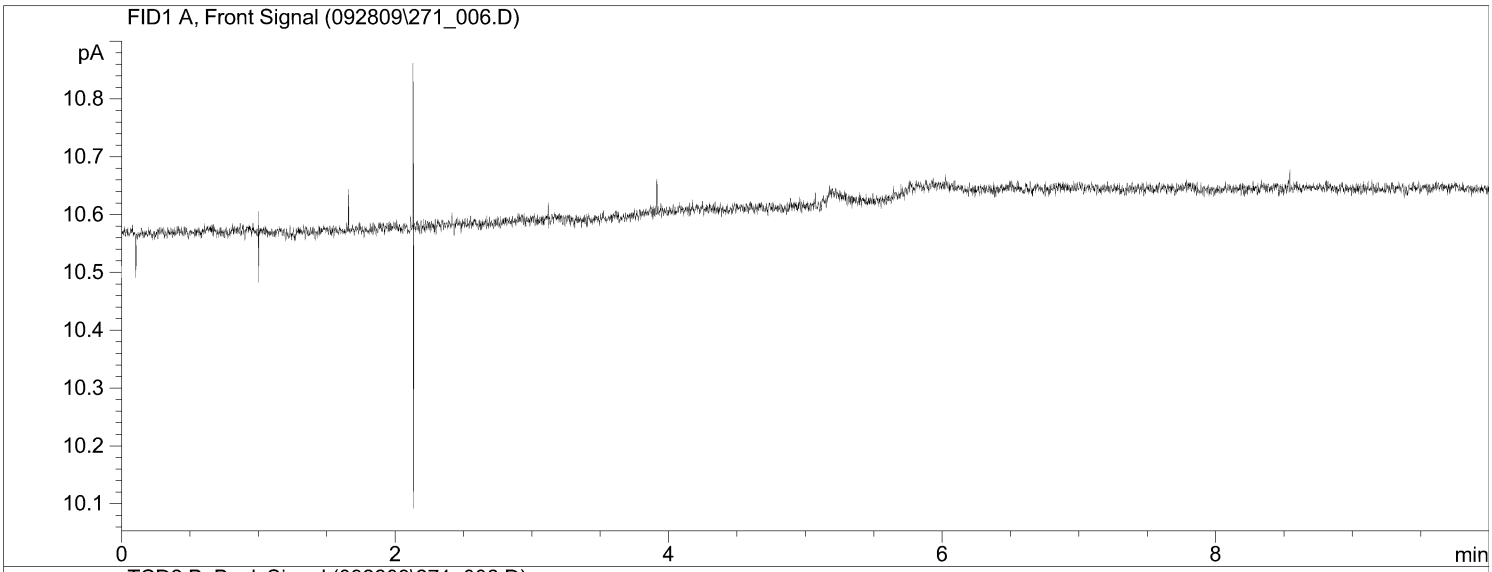
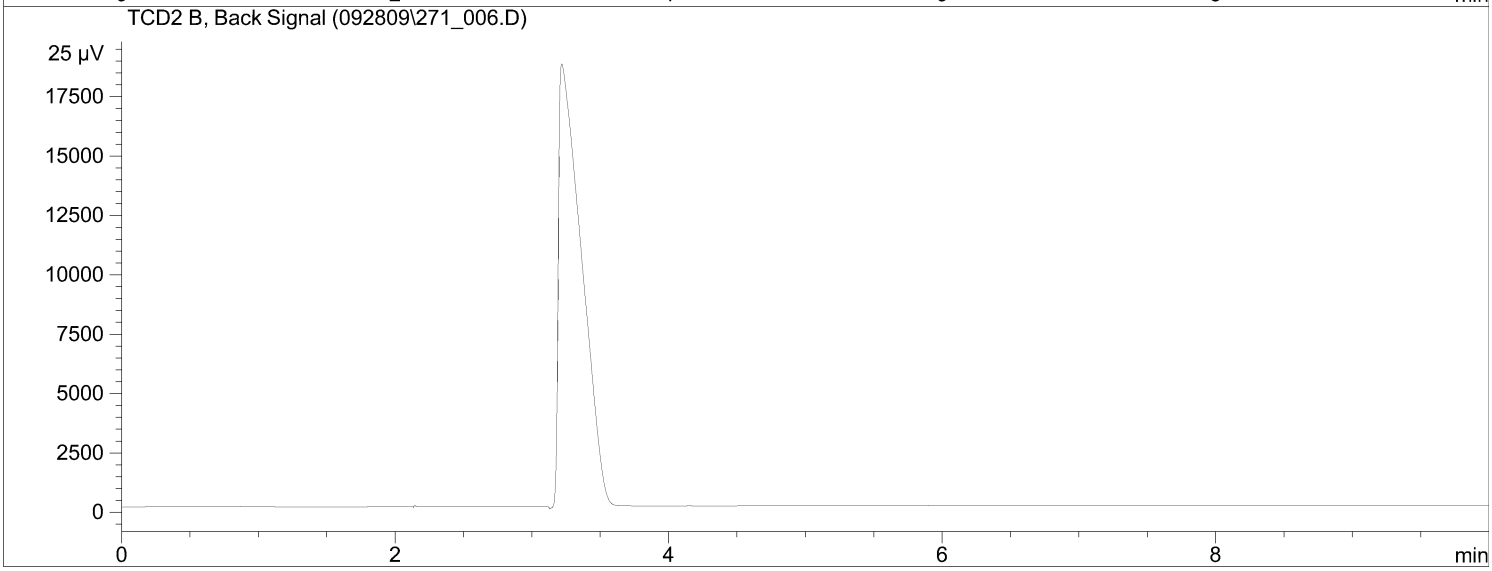
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_006.D
Sample Name: mb,qc513933,155375,1

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 11:25:11 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_090209.M
Last changed : 9/28/2009 11:15:21 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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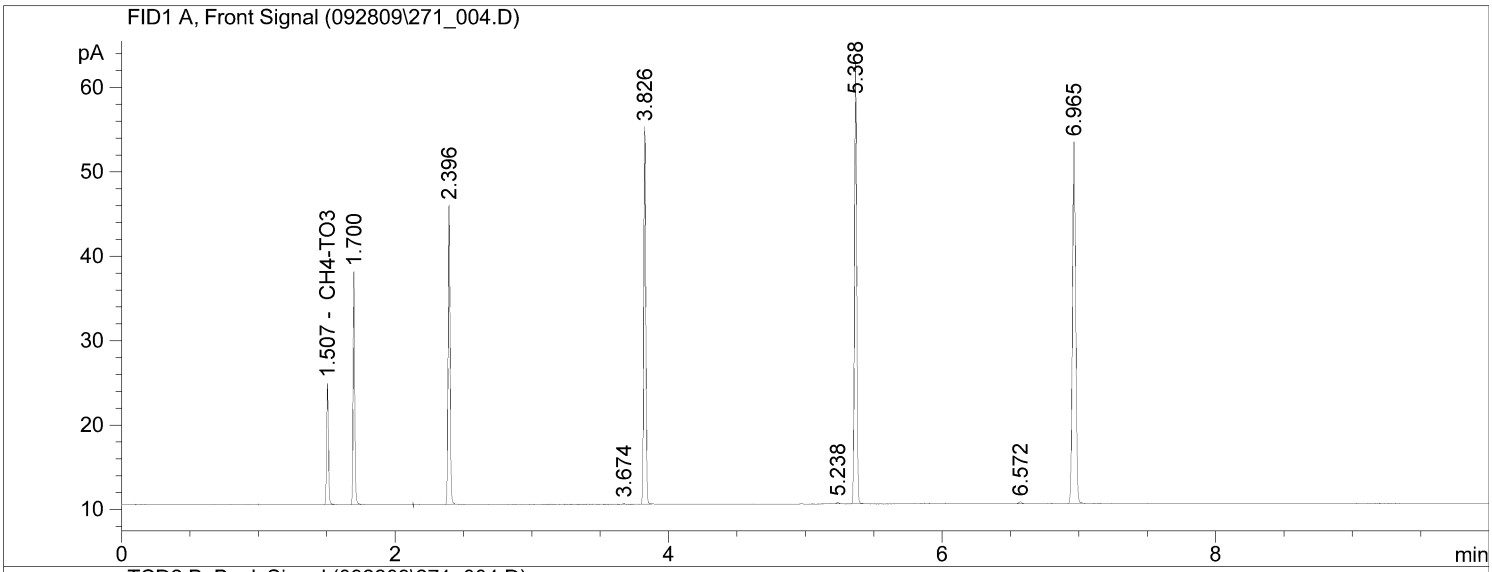
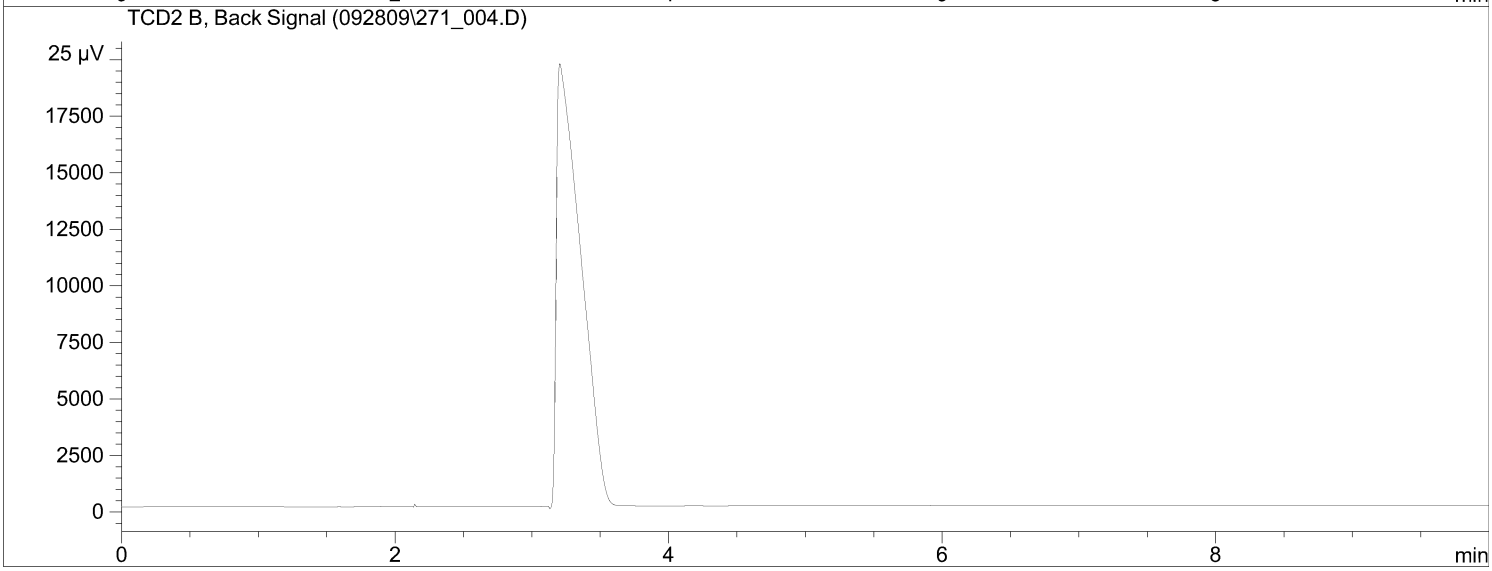
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_004.D
Sample Name: ccv,s13027,1

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 10:26:48 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_090209.M
Last changed : 9/28/2009 10:26:46 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214904 GCAIR Air: ASTM D1946

Inst : GC28
Calnum : 1309353595002
Units : uL/L

Date : 02-SEP-2009 14:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	245_003	1309353595003		02-SEP-2009 14:11	S12872
L2	245_005	1309353595005		02-SEP-2009 14:55	S12875
L3	245_006	1309353595006		02-SEP-2009 15:21	S12876
L4	245_007	1309353595007		02-SEP-2009 15:41	S12877
L5	245_008	1309353595008		02-SEP-2009 16:01	S12878
L6	245_009	1309353595009		02-SEP-2009 16:33	S12879

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Oxygen	B		0.2204	0.2192	0.3049	0.2006		AVRG		4.23288		0.2362	20	.99	
Carbon Dioxide	B		0.2630	0.2627	0.2696	0.2358		AVRG		3.87925		0.2578	6	.99	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Oxygen	B			2000	-7	5000	-7	10000	**29**	2E+5	-15		
Carbon Dioxide	B			2000	2	5000	2	10000	5	2E+5	-9		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214904 GCAIR Air: EPA TO-3

Inst : GC28
Calnum : 1309386373003
Units : uL/L

Date : 25-SEP-2009 09:45
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	268_004	1309386373004		25-SEP-2009 09:45	S13012
L2	268_005	1309386373005		25-SEP-2009 10:23	S13013
L3	268_006	1309386373006		25-SEP-2009 10:43	S13018
L4	268_007	1309386373007		25-SEP-2009 11:03	S13019
L5	268_008	1309386373008		25-SEP-2009 11:38	S13020
L6	268_009	1309386373009		25-SEP-2009 12:03	S13021
L7	268_010	1309386373010		25-SEP-2009 12:25	S13022
L8	268_011	1309386373011		25-SEP-2009 12:44	S13023

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Methane-TO3	A	0.1399	0.1223	0.1365	0.1215	0.1330	0.1234	0.1257	0.1212	AVRG		7.81703		0.1279	6	.99	30	
C1-C2 as Ethane	A	0.2484	0.2263	0.2524	0.2227	0.2439				AVRG		4.18857		0.2387	6	.99	30	
C2-C3 as Propane	A	0.4084	0.3398	0.3792	0.3368	0.3690				AVRG		2.72739		0.3667	8	.99	30	
C3-C4 as n-Butane	A	0.5095	0.4544	0.5049	0.4476	0.4905				AVRG		2.07734		0.4814	6	.99	30	
C4-C5 as n-Pentane	A	0.5858	0.5651	0.6316	0.5604	0.6132				AVRG		1.69143		0.5912	5	.99	30	
C5-C6 as n-Hexane	A	0.7275	0.6826	0.7518	0.6683	0.7282				AVRG		1.40515		0.7117	5	.99	30	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Methane-TO3	A	0.500	9	10.00	-4	100.0	7	501.0	-5	1002	4	9980	-4	2E+5	-2	5E+5	-5
C1-C2 as Ethane	A	0.500	4	10.00	-5	100.0	6	505.5	-7	1011	2						
C2-C3 as Propane	A	0.500	11	10.00	-7	100.0	3	501.0	-8	1002	1						
C3-C4 as n-Butane	A	0.500	6	10.00	-6	100.0	5	502.5	-7	1005	2						
C4-C5 as n-Pentane	A	0.500	-1	10.00	-4	100.0	7	500.0	-5	1000	4						
C5-C6 as n-Hexane	A	0.500	2	10.00	-4	100.0	6	498.5	-6	997.0	2						

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214904 GCAIR Air
EPA TO-3

Inst : GC28
Calnum : 1309386373003 Cal Date : 25-SEP-2009

ICV 1309386373013 (268_013 25-SEP-2009) stds: S13025

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Methane-TO3	A	50000	49590	uL/L	-1	30	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214904 GCAIR Air
ASTM D1946

Inst : GC28 Run Name : QC513938 IDF : 1.0
Seqnum : 1309390746003.7 File : 271_003 Time : 28-SEP-2009 09:41
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Carbon Dioxide	B	0.2578	0.2578	10000	10010	uL/L	0	30	u **y**
Oxygen	B	0.2362	0.2309	10000	9772	uL/L	-2	30	u **y**

APP 09/28/09 : Sample Name entered incorrectly into sequence raw data. [general version]

u=use y=RL raised

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214904 GCAIR Air
EPA TO-3

Inst : GC28 Run Name : QC513934 IDF : 1.0
Seqnum : 1309390746004.7 File : 271_004 Time : 28-SEP-2009 10:26
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1300	100.0	101.9	uL/L	2	30	u
C1-C2 as Ethane	A	0.2387	0.2405	100.0	100.7	uL/L	1	30	u
C2-C3 as Propane	A	0.3667	0.3610	100.0	98.45	uL/L	-2	30	u
C3-C4 as n-Butane	A	0.4814	0.4819	100.0	100.1	uL/L	0	30	u
C4-C5 as n-Pentane	A	0.5912	0.6031	100.0	102.0	uL/L	2	30	u
C5-C6 as n-Hexane	A	0.7117	0.7176	100.0	100.8	uL/L	1	30	u

APP 09/28/09 : Sample Name entered incorrectly into sequence raw data. [general version]

u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309390746014.3 File : 271_014 Time : 28-SEP-2009 15:21
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Oxygen	B	0.2362	0.2222	10000	9407	uL/L	-6	30	
Carbon Dioxide	B	0.2578	0.2624	10000	10180	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309390746015.3 File : 271_015 Time : 28-SEP-2009 15:40
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1394	100.0	109.2	uL/L	9	30	
C1-C2 as Ethane	A	0.2387	0.2430	100.0	101.8	uL/L	2	30	
C2-C3 as Propane	A	0.3667	0.3642	100.0	99.34	uL/L	-1	30	
C3-C4 as n-Butane	A	0.4814	0.4854	100.0	100.8	uL/L	1	30	
C4-C5 as n-Pentane	A	0.5912	0.6069	100.0	102.7	uL/L	3	30	
C5-C6 as n-Hexane	A	0.7117	0.7224	100.0	101.5	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309390746024.3 File : 271_024 Time : 28-SEP-2009 18:48
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Oxygen	B	0.2362	0.2191	10000	9275	uL/L	-7	30	
Carbon Dioxide	B	0.2578	0.2637	10000	10230	uL/L	2	30	

APP 09/28/09 [Nitrogen B]: Drew baseline due to software limitations .

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309390746025.2 File : 271_025 Time : 28-SEP-2009 19:08
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1206	100.0	94.48	uL/L	-6	30	
C1-C2 as Ethane	A	0.2387	0.2228	100.0	93.31	uL/L	-7	30	
C2-C3 as Propane	A	0.3667	0.3345	100.0	91.22	uL/L	-9	30	
C3-C4 as n-Butane	A	0.4814	0.4448	100.0	92.39	uL/L	-8	30	
C4-C5 as n-Pentane	A	0.5912	0.5569	100.0	94.20	uL/L	-6	30	
C5-C6 as n-Hexane	A	0.7117	0.6625	100.0	93.09	uL/L	-7	30	

APP 09/28/09 : Incorrect standard ID entered into sequence raw data.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309392160002.4 File : 272_002 Time : 29-SEP-2009 08:18
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Oxygen	B	0.2362	0.2273	10000	9623	uL/L	-4	30	
Carbon Dioxide	B	0.2578	0.2586	10000	10040	uL/L	0	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309392160003.3 File : 272_003 Time : 29-SEP-2009 08:40
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1329	100.0	104.1	uL/L	4	30	
C1-C2 as Ethane	A	0.2387	0.2366	100.0	99.09	uL/L	-1	30	
C2-C3 as Propane	A	0.3667	0.3550	100.0	96.82	uL/L	-3	30	
C3-C4 as n-Butane	A	0.4814	0.4731	100.0	98.28	uL/L	-2	30	
C4-C5 as n-Pentane	A	0.5912	0.5921	100.0	100.2	uL/L	0	30	
C5-C6 as n-Hexane	A	0.7117	0.7041	100.0	98.93	uL/L	-1	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309392160016.3 File : 272_016 Time : 29-SEP-2009 13:32
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Oxygen	B	0.2362	0.2188	10000	9260	uL/L	-7	30	
Carbon Dioxide	B	0.2578	0.2639	10000	10240	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214904 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309392160017.3 File : 272_017 Time : 29-SEP-2009 13:53
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1293	100.0	101.3	uL/L	1	30	
C1-C2 as Ethane	A	0.2387	0.2396	100.0	100.4	uL/L	0	30	
C2-C3 as Propane	A	0.3667	0.3594	100.0	98.01	uL/L	-2	30	
C3-C4 as n-Butane	A	0.4814	0.4788	100.0	99.47	uL/L	-1	30	
C4-C5 as n-Pentane	A	0.5912	0.5997	100.0	101.4	uL/L	1	30	
C5-C6 as n-Hexane	A	0.7117	0.7130	100.0	100.2	uL/L	0	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309353595

Instrument : GC28 Begun : 09/02/09 13:15
Method : ASTM D1946

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	245_001	IB	IB			09/02/09 13:15	1.0		
002	245_002	IB	IB			09/02/09 13:49	1.0		
003	245_003	ICAL				09/02/09 14:11	1.0	1	
004	245_004	X				09/02/09 14:31	1.0	2	
005	245_005	ICAL				09/02/09 14:55	1.0	3	
006	245_006	ICAL				09/02/09 15:21	1.0	4	
007	245_007	ICAL				09/02/09 15:41	1.0	5	
008	245_008	ICAL				09/02/09 16:01	1.0	6	
009	245_009	ICAL				09/02/09 16:33	1.0	7	

APP 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 009.

APP 10/05/09 : Run 004 was used to test response at low level. Due to poor response this point will never be used.

Analyst: APP Date: 09/25/09 Reviewer: SJD Date: 10/06/09

Standards used: 1=S12872 2=S12874 3=S12875 4=S12876 5=S12877 6=S12878 7=S12879

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309386373

Instrument : GC28 Begun : 09/25/09 07:33
Method : ASTM D1946, EPA TO-3

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	268_001	IB	IB			09/25/09 07:33	1.0		
002	268_002	CCV				09/25/09 07:50	1.0	1	11:C1-C2=1100
003	268_003	IB	IB			09/25/09 08:19	1.0		
004	268_004	ICAL				09/25/09 09:45	1.0	2	
005	268_005	ICAL				09/25/09 10:23	1.0	3	
006	268_006	ICAL				09/25/09 10:43	1.0	4	
007	268_007	ICAL				09/25/09 11:03	1.0	5	
008	268_008	ICAL				09/25/09 11:38	1.0	6	
009	268_009	ICAL				09/25/09 12:03	1.0	7	
010	268_010	ICAL				09/25/09 12:25	1.0	8	
011	268_011	ICAL				09/25/09 12:44	1.0	9	
012	268_012	IB	IB			09/25/09 13:26	1.0		
013	268_013	ICV				09/25/09 13:45	1.0	10	10:C1-C2=40000

APP 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 013.

Analyst: APP Date: 09/25/09 Reviewer: SJD Date: 10/07/09

Standards used: 1=S12959 2=S13012 3=S13013 4=S13018 5=S13019 6=S13020 7=S13021 8=S13022 9=S13023 10=S13025

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309390746

Instrument : GC28 Begun : 09/28/09 08:26
Method : ASTM D1946, EPA TO-3

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	271_001	IB	IB			09/28/09 08:26	1.0	
002	271_002	IB	IB			09/28/09 09:22	1.0	
003	271_003	CCV/LCS	QC513938	Air	155375	09/28/09 09:41	1.0	1
004	271_004	CCV/BS	QC513934	Air	155375	09/28/09 10:26	1.0	2
005	271_005	BSD	QC513935	Air	155375	09/28/09 11:00	1.0	2
006	271_006	BLANK	QC513933	Air	155375	09/28/09 11:25	1.0	
007	271_007	BLANK	QC513937	Air	155375	09/28/09 12:27	1.0	
008	271_008	MSS	214904-001	Air	155375	09/28/09 13:00	3.11	
009	271_009	SDUP	QC513936	Air	155375	09/28/09 13:20	3.11	
010	271_010	MSS	214904-003	Air	155375	09/28/09 13:44	2.07	
011	271_011	SDUP	QC513939	Air	155375	09/28/09 14:03	2.07	
012	271_012	SAMPLE	214904-002	Air	155375	09/28/09 14:31	1.97	
013	271_013	IB	IB			09/28/09 14:54	1.0	
014	271_014	CCV				09/28/09 15:21	1.0	1
015	271_015	CCV				09/28/09 15:40	1.0	2
016	271_016	SAMPLE	214904-004	Air	155375	09/28/09 16:08	2.21	
017	271_017	SAMPLE	214904-005	Air	155375	09/28/09 16:25	2.300	
018	271_018	SAMPLE	214904-006	Air	155375	09/28/09 16:46	2.19	
019	271_019	SAMPLE	214904-007	Air	155375	09/28/09 17:08	2.09	
020	271_020	SAMPLE	214904-008	Air	155375	09/28/09 17:27	2.08	
021	271_021	SAMPLE	214904-009	Air	155375	09/28/09 17:47	2.22	
022	271_022	SAMPLE	214904-010	Air	155375	09/28/09 18:08	2.18	
023	271_023	IB	IB			09/28/09 18:26	1.0	
024	271_024	CCV				09/28/09 18:48	1.0	1
025	271_025	CCV				09/28/09 19:08	1.0	2

APP 09/29/09 : Matrix spikes were not performed for this analysis in batch 155375 because they are not required by the method.

APP 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 025.

Analyst: APP Date: 09/29/09 Reviewer: SJD Date: 10/07/09

Standards used: 1=S13026 2=S13027

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309392160

Instrument : GC28 Begun : 09/29/09 08:00
Method : ASTM D1946, EPA TO-3

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	272_001	IB	IB			09/29/09 08:00	1.0	
002	272_002	CCV				09/29/09 08:18	1.0	1
003	272_003	CCV				09/29/09 08:40	1.0	2
004	272_004	SAMPLE	214904-010	Air	155375	09/29/09 09:02	2.18	
005	272_005	SAMPLE	214904-002	Air	155375	09/29/09 09:20	1.97	
006	272_006	SAMPLE	214904-009	Air	155375	09/29/09 09:41	2.22	
007	272_007	SAMPLE	214904-011	Air	155375	09/29/09 10:01	2.17	
008	272_008	SAMPLE	214904-012	Air	155375	09/29/09 10:27	2.16	
009	272_009	IB	IB			09/29/09 10:59	1.0	
010	272_010	SAMPLE	214904-013	Air	155375	09/29/09 11:20	2.100	
011	272_011	SAMPLE	214904-014	Air	155375	09/29/09 11:39	2.11	
012	272_012	SAMPLE	214999-005	Air	155375	09/29/09 12:03	2.06	
013	272_013	SAMPLE	214999-006	Air	155375	09/29/09 12:24	2.07	
014	272_014	SAMPLE	214999-007	Air	155375	09/29/09 12:51	2.11	
015	272_015	IB	IB			09/29/09 13:12	1.0	
016	272_016	CCV				09/29/09 13:32	1.0	1
017	272_017	CCV				09/29/09 13:53	1.0	2

APP 09/29/09 : Matrix spikes were not performed for this analysis in batch 155375 because they are not required by the method.

APP 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 017.

Analyst: APP Date: 09/29/09 Reviewer: SJD Date: 10/07/09

Standards used: 1=S13026 2=S13027

Page 1 of 1

PROJECT _____

Continued From Page _____

~~Date~~	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Fac	Comments
9/23/04 AM	214897-005	C00014	1.5 added	30.00	42.6x	20x of 2.13 x C00110
↓	↓ 006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
500 9/26/05	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00055	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.18	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1203	—	—	1x	

Continued on Page

Read and Understood By

Signed	Date	Signed	Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214999
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE Permit
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
ASE-61A-9Q3	214999-001
BSVE-SVM-9Q3-006	214999-002
BC-7A-9Q3	214999-003
ASE-60A-9Q3	214999-004
PMW-9-M-9Q3	214999-005
PMW-9-U-9Q3	214999-006
BSVE-SVM-9Q3-002	214999-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/13/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214999**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE Permit**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

This data package contains sample and QC results for seven air samples, requested for the above referenced project on 09/16/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
Low surrogate recovery was observed for bromofluorobenzene in ASE-60A-9Q3 (lab # 214999-004), due to matrix interference.

PMW-9-M-9Q3 (lab # 214999-005), PMW-9-U-9Q3 (lab # 214999-006), and BSVE-SVM-9Q3-002 (lab # 214999-007) were diluted due to passive grab sampling.

BC-7A-9Q3 (lab # 214999-003) and ASE-60A-9Q3 (lab # 214999-004) were diluted due to problematic matrix.

No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):
No analytical problems were encountered.

Chain of Custody

214994

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	39967.60259
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: VLADIMIR CARINO
PO #: 4990342
Analysis Turnaround Time (TAT): 10
Consultant
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	TO-15 (VOCs)	TO-3M (Methane and TPH C6-C10)	TO-3M (Methane)	ASTM 1946 (O2 and CO2)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units							
1	ASE-61A	60.5	63.3	ASE-61A-9Q3	9/14/09	15:40	AIR	AIR	REG	1	G	N	X					64
2	ASE-61A	60.5	63.3	BSVE-SVM-9Q3-006	9/14/09	15:41	AIR	AIR	REG	1	G	N	X					124
3	BC-7A	39	64.03	BC-7A-9Q3	9/14/09	14:24	AIR	AIR	REG	1	G	N	X					123
4	ASE-60A	61	63.71	ASE-60A-9Q3	9/14/09	11:34	AIR	AIR	REG	1	G	N	X					55
5	PMW-9M	20	25	PMW-9-M-9Q3	9/14/09	0826	AIR	AIR	REG	1	G	N	X	X		X		197
6	PMW-9-U	5	10	PMW-9-U-9Q3	9/14/09	0854	AIR	AIR	REG	1	G	N	X	X		X		153
7	FieldQC	–	–	BSVE-SVM-9Q3-002	9/14/09	0926	AIR	AIR	QC	1	G	N	X	X		X		147
8																		
9																		
10																		
11																		
12																		

Relinquished by: VLADIMIR CARINO	Company: CH2M HILL	Received by:	Company: CH2M HILL	Condition		Custody Seals Intact	
	Date/Time: 9/14/09 17:07		Date/Time: 9/14/09 1710	Cooler Temp.			
Relinquished by:	Company: CH2M HILL	Received by:	Company:	Condition		Custody Seals Intact	
	Date/Time: 9/15/09 0830	FedEx	Date/Time:	Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

Rec'd 9/16/9 1000

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 714999 Date Received 9-16-9 Number of coolers 1BX
Client CH2MHIL Project BSUE QTR SUM

Date Opened 9.16.9 By (print) SEVANS (sign) [signature]
Date Logged in 9-18-9 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # (YES) NO
   Shipping info 7928 0536 5569

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ YES NO (N/A)
15. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Laboratory Job Number 214999

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-61A-9Q3	Units (M):	ug/m3
Lab ID:	214999-001	Sampled:	09/14/09
Matrix:	Air	Received:	09/16/09
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	13	ND	66	26.64	155785	10/07/09	D2
Vinyl Chloride	ND	13	ND	34	26.64	155785	10/07/09	D2
Chloroethane	ND	13	ND	35	26.64	155785	10/07/09	D2
Trichlorofluoromethane	ND	13	ND	75	26.64	155785	10/07/09	D2
1,1-Dichloroethene	ND	13	ND	53	26.64	155785	10/07/09	D2
Methylene Chloride	ND	13	ND	46	26.64	155785	10/07/09	D2
Freon 113	ND	13	ND	100	26.64	155785	10/07/09	D2
trans-1,2-Dichloroethene	ND	13	ND	53	26.64	155785	10/07/09	D2
1,1-Dichloroethane	ND	13	ND	54	26.64	155785	10/07/09	D2
MTBE	ND	13	ND	48	26.64	155785	10/07/09	D2
cis-1,2-Dichloroethene	ND	13	ND	53	26.64	155785	10/07/09	D2
n-Hexane	28	13	97	47	26.64	155785	10/07/09	D2
Chloroform	23	13	110	65	26.64	155785	10/07/09	D2
1,2-Dichloroethane	ND	13	ND	54	26.64	155785	10/07/09	D2
1,1,1-Trichloroethane	ND	13	ND	73	26.64	155785	10/07/09	D2
Benzene	ND	13	ND	43	26.64	155785	10/07/09	D2
Carbon Tetrachloride	ND	13	ND	84	26.64	155785	10/07/09	D2
1,4-Dioxane	ND	13	ND	48	26.64	155785	10/07/09	D2
Trichloroethene	1,300	22	6,800	120	44.40	155830	10/08/09	D2
Toluene	ND	13	ND	50	26.64	155785	10/07/09	D2
Tetrachloroethene	120	13	810	90	26.64	155785	10/07/09	D2
Ethylbenzene	54	13	240	58	26.64	155785	10/07/09	D2
m,p-Xylenes	27	13	120	58	26.64	155785	10/07/09	D2
o-Xylene	ND	13	ND	58	26.64	155785	10/07/09	D2
1,3,5-Trimethylbenzene	26	13	130	65	26.64	155785	10/07/09	D2
1,2,4-Trimethylbenzene	96	13	470	65	26.64	155785	10/07/09	D2
1,4-Dichlorobenzene	ND	13	ND	80	26.64	155785	10/07/09	D2
Xylene (total)	27	27	120	120	26.64	155785	10/07/09	D2

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Bromofluorobenzene	99	70-130	26.64	155785	10/07/09	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-006	Units (M):	ug/m3
Lab ID:	214999-002	Sampled:	09/14/09
Matrix:	Air	Received:	09/16/09
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	13	ND	66	26.64	155785	10/07/09	D2
Vinyl Chloride	ND	13	ND	34	26.64	155785	10/07/09	D2
Chloroethane	ND	13	ND	35	26.64	155785	10/07/09	D2
Trichlorofluoromethane	ND	13	ND	75	26.64	155785	10/07/09	D2
1,1-Dichloroethene	ND	13	ND	53	26.64	155785	10/07/09	D2
Methylene Chloride	ND	13	ND	46	26.64	155785	10/07/09	D2
Freon 113	ND	13	ND	100	26.64	155785	10/07/09	D2
trans-1,2-Dichloroethene	ND	13	ND	53	26.64	155785	10/07/09	D2
1,1-Dichloroethane	ND	13	ND	54	26.64	155785	10/07/09	D2
MTBE	ND	13	ND	48	26.64	155785	10/07/09	D2
cis-1,2-Dichloroethene	ND	13	ND	53	26.64	155785	10/07/09	D2
n-Hexane	ND	13	ND	47	26.64	155785	10/07/09	D2
Chloroform	35	13	170	65	26.64	155785	10/07/09	D2
1,2-Dichloroethane	ND	13	ND	54	26.64	155785	10/07/09	D2
1,1,1-Trichloroethane	ND	13	ND	73	26.64	155785	10/07/09	D2
Benzene	ND	13	ND	43	26.64	155785	10/07/09	D2
Carbon Tetrachloride	ND	13	ND	84	26.64	155785	10/07/09	D2
1,4-Dioxane	ND	13	ND	48	26.64	155785	10/07/09	D2
Trichloroethene	1,800	44	9,700	240	88.80	155830	10/08/09	D1
Toluene	ND	13	ND	50	26.64	155785	10/07/09	D2
Tetrachloroethene	160	13	1,100	90	26.64	155785	10/07/09	D2
Ethylbenzene	53	13	230	58	26.64	155785	10/07/09	D2
m,p-Xylenes	28	13	120	58	26.64	155785	10/07/09	D2
o-Xylene	ND	13	ND	58	26.64	155785	10/07/09	D2
1,3,5-Trimethylbenzene	36	13	180	65	26.64	155785	10/07/09	D2
1,2,4-Trimethylbenzene	130	13	660	65	26.64	155785	10/07/09	D2
1,4-Dichlorobenzene	ND	13	ND	80	26.64	155785	10/07/09	D2
Xylene (total)	28	27	120	120	26.64	155785	10/07/09	D2

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Bromofluorobenzene	104	70-130	26.64	155785	10/07/09	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BC-7A-9Q3	Diln Fac:	13.80
Lab ID:	214999-003	Batch#:	155785
Matrix:	Air	Sampled:	09/14/09
Units (V):	ppbv	Received:	09/16/09
Units (M):	ug/m3	Analyzed:	10/08/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	6.9	ND	34	D1
Vinyl Chloride	ND	6.9	ND	18	D1
Chloroethane	ND	6.9	ND	18	D1
Trichlorofluoromethane	ND	6.9	ND	39	D1
1,1-Dichloroethene	36	6.9	140	27	D1
Methylene Chloride	ND	6.9	ND	24	D1
Freon 113	ND	6.9	ND	53	D1
trans-1,2-Dichloroethene	ND	6.9	ND	27	D1
1,1-Dichloroethane	ND	6.9	ND	28	D1
MTBE	ND	6.9	ND	25	D1
cis-1,2-Dichloroethene	ND	6.9	ND	27	D1
n-Hexane	37	6.9	130	24	D1
Chloroform	13	6.9	65	34	D1
1,2-Dichloroethane	ND	6.9	ND	28	D1
1,1,1-Trichloroethane	ND	6.9	ND	38	D1
Benzene	8.8	6.9	28	22	D1
Carbon Tetrachloride	ND	6.9	ND	43	D1
1,4-Dioxane	ND	6.9	ND	25	D1
Trichloroethene	ND	6.9	ND	37	D1
Toluene	11	6.9	42	26	D1
Tetrachloroethene	63	6.9	430	47	D1
Ethylbenzene	86	6.9	370	30	D1
m,p-Xylenes	40	6.9	170	30	D1
o-Xylene	ND	6.9	ND	30	D1
1,3,5-Trimethylbenzene	40	6.9	200	34	D1
1,2,4-Trimethylbenzene	120	6.9	610	34	D1
1,4-Dichlorobenzene	ND	6.9	ND	41	D1
Xylene (total)	40	14	170	60	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-60A-9Q3	Diln Fac:	129.6
Lab ID:	214999-004	Batch#:	155785
Matrix:	Air	Sampled:	09/14/09
Units (V):	ppbv	Received:	09/16/09
Units (M):	ug/m3	Analyzed:	10/08/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	65	ND	320	D1
Vinyl Chloride	ND	65	ND	170	D1
Chloroethane	ND	65	ND	170	D1
Trichlorofluoromethane	ND	65	ND	360	D1
1,1-Dichloroethene	ND	65	ND	260	D1
Methylene Chloride	ND	65	ND	230	D1
Freon 113	ND	65	ND	500	D1
trans-1,2-Dichloroethene	ND	65	ND	260	D1
1,1-Dichloroethane	ND	65	ND	260	D1
MTBE	ND	65	ND	230	D1
cis-1,2-Dichloroethene	330	65	1,300	260	D1
n-Hexane	420	65	1,500	230	D1
Chloroform	ND	65	ND	320	D1
1,2-Dichloroethane	ND	65	ND	260	D1
1,1,1-Trichloroethane	ND	65	ND	350	D1
Benzene	ND	65	ND	210	D1
Carbon Tetrachloride	ND	65	ND	410	D1
1,4-Dioxane	ND	65	ND	230	D1
Trichloroethene	77	65	410	350	D1
Toluene	ND	65	ND	240	D1
Tetrachloroethene	ND	65	ND	440	D1
Ethylbenzene	150	65	640	280	D1
m,p-Xylenes	ND	65	ND	280	D1
o-Xylene	ND	65	ND	280	D1
1,3,5-Trimethylbenzene	ND	65	ND	320	D1
1,2,4-Trimethylbenzene	500	65	2,500	320	D1
1,4-Dichlorobenzene	ND	65	ND	390	D1
Xylene (total)	ND	130	ND	560	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	58 *	70-130	S7

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-9-M-9Q3	Diln Fac:	2.060
Lab ID:	214999-005	Batch#:	155785
Matrix:	Air	Sampled:	09/14/09
Units (V):	ppbv	Received:	09/16/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	2.9	1.0	10	3.6	D1
Chloroform	9.0	1.0	44	5.0	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	ND	1.0	ND	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	2.0	1.0	11	5.5	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	ND	1.0	ND	7.0	D1
Ethylbenzene	3.9	1.0	17	4.5	D1
m,p-Xylenes	4.7	1.0	20	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	4.3	1.0	21	5.1	D1
1,2,4-Trimethylbenzene	18	1.0	88	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	4.7	2.1	20	8.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	PMW-9-U-9Q3	Diln Fac:	2.070
Lab ID:	214999-006	Batch#:	155785
Matrix:	Air	Sampled:	09/14/09
Units (V):	ppbv	Received:	09/16/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.0	ND	5.1	D1
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
Trichlorofluoromethane	ND	1.0	ND	5.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
Methylene Chloride	ND	1.0	ND	3.6	D1
Freon 113	ND	1.0	ND	7.9	D1
trans-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	4.7	1.0	17	3.6	D1
Chloroform	7.8	1.0	38	5.1	D1
1,2-Dichloroethane	ND	1.0	ND	4.2	D1
1,1,1-Trichloroethane	ND	1.0	ND	5.6	D1
Benzene	1.7	1.0	5.5	3.3	D1
Carbon Tetrachloride	ND	1.0	ND	6.5	D1
1,4-Dioxane	ND	1.0	ND	3.7	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	ND	1.0	ND	7.0	D1
Ethylbenzene	5.2	1.0	22	4.5	D1
m,p-Xylenes	6.0	1.0	26	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	5.5	1.0	27	5.1	D1
1,2,4-Trimethylbenzene	22	1.0	110	5.1	D1
1,4-Dichlorobenzene	ND	1.0	ND	6.2	D1
Xylene (total)	6.0	2.1	26	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-9Q3-002	Diln Fac:	2.110
Lab ID:	214999-007	Batch#:	155785
Matrix:	Air	Sampled:	09/14/09
Units (V):	ppbv	Received:	09/16/09
Units (M):	ug/m3	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	1.1	ND	5.2	D1
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
Trichlorofluoromethane	ND	1.1	ND	5.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
Methylene Chloride	ND	1.1	ND	3.7	D1
Freon 113	ND	1.1	ND	8.1	D1
trans-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	3.3	1.1	11	3.7	D1
Chloroform	8.7	1.1	42	5.2	D1
1,2-Dichloroethane	ND	1.1	ND	4.3	D1
1,1,1-Trichloroethane	ND	1.1	ND	5.8	D1
Benzene	ND	1.1	ND	3.4	D1
Carbon Tetrachloride	ND	1.1	ND	6.6	D1
1,4-Dioxane	ND	1.1	ND	3.8	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	ND	1.1	ND	7.2	D1
Ethylbenzene	3.5	1.1	15	4.6	D1
m,p-Xylenes	4.1	1.1	18	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	3.5	1.1	17	5.2	D1
1,2,4-Trimethylbenzene	17	1.1	83	5.2	D1
1,4-Dichlorobenzene	ND	1.1	ND	6.3	D1
Xylene (total)	4.1	2.1	18	9.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155785
Units (V):	ppbv	Analyzed:	10/07/09
Diln Fac:	1.000		

Type: BS Lab ID: QC515614

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.406	94	70-130	
Vinyl Chloride	10.00	9.174	92	70-130	
Chloroethane	10.00	10.85	108	70-130	
Trichlorofluoromethane	10.00	9.405	94	70-130	
1,1-Dichloroethene	10.00	10.46	105	70-130	
Methylene Chloride	10.00	7.098	71	70-130	
Freon 113	10.00	9.490	95	70-130	
trans-1,2-Dichloroethene	10.00	9.558	96	70-130	
1,1-Dichloroethane	10.00	9.426	94	70-130	
MTBE	10.00	10.24	102	70-130	
cis-1,2-Dichloroethene	10.00	9.775	98	70-130	
n-Hexane	10.00	10.06	101	70-130	
Chloroform	10.00	9.999	100	70-130	
1,2-Dichloroethane	10.00	9.517	95	70-130	
1,1,1-Trichloroethane	10.00	9.786	98	70-130	
Benzene	10.00	9.940	99	70-130	
Carbon Tetrachloride	10.00	9.657	97	70-130	
1,4-Dioxane	10.00	9.994	100	70-130	
Trichloroethene	10.00	8.645	86	70-130	
Toluene	10.00	9.640	96	70-130	
Tetrachloroethene	10.00	8.996	90	70-130	
Ethylbenzene	10.00	10.01	100	70-130	
m,p-Xylenes	20.00	19.93	100	70-130	
o-Xylene	10.00	9.809	98	70-130	
1,3,5-Trimethylbenzene	10.00	9.592	96	70-130	
1,2,4-Trimethylbenzene	10.00	10.21	102	70-130	
1,4-Dichlorobenzene	10.00	9.209	92	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155785
Units (V):	ppbv	Analyzed:	10/07/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC515615

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.534	95	70-130	1	25	
Vinyl Chloride	10.00	9.833	98	70-130	7	25	
Chloroethane	10.00	10.50	105	70-130	3	25	
Trichlorofluoromethane	10.00	9.422	94	70-130	0	25	
1,1-Dichloroethene	10.00	10.55	105	70-130	1	25	
Methylene Chloride	10.00	7.089	71	70-130	0	25	
Freon 113	10.00	9.478	95	70-130	0	25	
trans-1,2-Dichloroethene	10.00	9.852	99	70-130	3	25	
1,1-Dichloroethane	10.00	9.697	97	70-130	3	25	
MTBE	10.00	10.30	103	70-130	1	25	
cis-1,2-Dichloroethene	10.00	10.03	100	70-130	3	25	
n-Hexane	10.00	10.07	101	70-130	0	25	
Chloroform	10.00	10.24	102	70-130	2	25	
1,2-Dichloroethane	10.00	9.382	94	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.566	96	70-130	2	25	
Benzene	10.00	9.782	98	70-130	2	25	
Carbon Tetrachloride	10.00	9.390	94	70-130	3	25	
1,4-Dioxane	10.00	9.471	95	70-130	5	25	
Trichloroethene	10.00	8.457	85	70-130	2	25	
Toluene	10.00	9.661	97	70-130	0	25	
Tetrachloroethene	10.00	9.381	94	70-130	4	25	
Ethylbenzene	10.00	10.04	100	70-130	0	25	
m,p-Xylenes	20.00	20.21	101	70-130	1	25	
o-Xylene	10.00	9.971	100	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	9.619	96	70-130	0	25	
1,2,4-Trimethylbenzene	10.00	10.05	100	70-130	2	25	
1,4-Dichlorobenzene	10.00	9.257	93	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC515616	Diln Fac:	1.000
Matrix:	Air	Batch#:	155785
Units (V):	ppbv	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155830
Units (V):	ppbv	Analyzed:	10/08/09
Diln Fac:	1.000		

Type: BS Lab ID: QC515777

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.722	97	70-130	
Vinyl Chloride	10.00	10.86	109	70-130	
Chloroethane	10.00	11.00	110	70-130	
Trichlorofluoromethane	10.00	9.608	96	70-130	
1,1-Dichloroethene	10.00	10.58	106	70-130	
Methylene Chloride	10.00	7.603	76	70-130	
Freon 113	10.00	9.608	96	70-130	
trans-1,2-Dichloroethene	10.00	9.766	98	70-130	
1,1-Dichloroethane	10.00	9.689	97	70-130	
MTBE	10.00	10.27	103	70-130	
cis-1,2-Dichloroethene	10.00	9.931	99	70-130	
n-Hexane	10.00	10.13	101	70-130	
Chloroform	10.00	10.06	101	70-130	
1,2-Dichloroethane	10.00	9.421	94	70-130	
1,1,1-Trichloroethane	10.00	9.784	98	70-130	
Benzene	10.00	9.838	98	70-130	
Carbon Tetrachloride	10.00	9.472	95	70-130	
1,4-Dioxane	10.00	9.376	94	70-130	
Trichloroethene	10.00	8.505	85	70-130	
Toluene	10.00	9.648	96	70-130	
Tetrachloroethene	10.00	9.307	93	70-130	
Ethylbenzene	10.00	10.10	101	70-130	
m,p-Xylenes	20.00	19.89	99	70-130	
o-Xylene	10.00	10.03	100	70-130	
1,3,5-Trimethylbenzene	10.00	9.626	96	70-130	
1,2,4-Trimethylbenzene	10.00	10.08	101	70-130	
1,4-Dichlorobenzene	10.00	9.163	92	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155830
Units (V):	ppbv	Analyzed:	10/08/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC515778

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.774	98	70-130	1	25	
Vinyl Chloride	10.00	10.43	104	70-130	4	25	
Chloroethane	10.00	10.90	109	70-130	1	25	
Trichlorofluoromethane	10.00	9.663	97	70-130	1	25	
1,1-Dichloroethene	10.00	10.79	108	70-130	2	25	
Methylene Chloride	10.00	7.780	78	70-130	2	25	
Freon 113	10.00	9.824	98	70-130	2	25	
trans-1,2-Dichloroethene	10.00	10.01	100	70-130	2	25	
1,1-Dichloroethane	10.00	9.854	99	70-130	2	25	
MTBE	10.00	10.43	104	70-130	2	25	
cis-1,2-Dichloroethene	10.00	10.18	102	70-130	2	25	
n-Hexane	10.00	9.946	99	70-130	2	25	
Chloroform	10.00	10.24	102	70-130	2	25	
1,2-Dichloroethane	10.00	9.502	95	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.652	97	70-130	1	25	
Benzene	10.00	9.811	98	70-130	0	25	
Carbon Tetrachloride	10.00	9.613	96	70-130	1	25	
1,4-Dioxane	10.00	9.360	94	70-130	0	25	
Trichloroethene	10.00	8.723	87	70-130	3	25	
Toluene	10.00	9.615	96	70-130	0	25	
Tetrachloroethene	10.00	9.269	93	70-130	0	25	
Ethylbenzene	10.00	10.11	101	70-130	0	25	
m,p-Xylenes	20.00	19.66	98	70-130	1	25	
o-Xylene	10.00	9.845	98	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	9.646	96	70-130	0	25	
1,2,4-Trimethylbenzene	10.00	10.07	101	70-130	0	25	
1,4-Dichlorobenzene	10.00	9.089	91	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC515779	Diln Fac:	1.000
Matrix:	Air	Batch#:	155830
Units (V):	ppbv	Analyzed:	10/08/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 214999 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209402039015 File : 278_015 Time : 05-OCT-2009 23:31

Standards: S13044 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	71543	11.09	
75	30% - 66% of mass 95	239418	37.11	
95		645234	100.00	
96	5% - 9% of mass 95	38635	5.99	
173	< 2% of mass 174	610	0.17	
174	50% - 120% of mass 95	353664	54.81	
175	4% - 9% of mass 174	26866	7.60	
176	93% - 101% of mass 174	341791	96.64	
177	5% - 9% of mass 176	23681	6.93	

CURTIS & TOMPKINS BFB TUNE FOR 214999 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209404057001 File : 280_001 Time : 07-OCT-2009 14:17

Standards: S13044

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	57702	10.14	
75	30% - 66% of mass 95	218675	38.43	
95		569035	100.00	
96	5% - 9% of mass 95	34220	6.01	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	320486	56.32	
175	4% - 9% of mass 174	20433	6.38	
176	93% - 101% of mass 174	300143	93.65	
177	5% - 9% of mass 176	17007	5.67	

CURTIS & TOMPKINS BFB TUNE FOR 214999 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209405420002 File : 281_002 Time : 08-OCT-2009 14:01

Standards: S13044

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	61104	10.83	
75	30% - 66% of mass 95	219498	38.90	
95		564198	100.00	
96	5% - 9% of mass 95	38080	6.75	
173	< 2% of mass 174	296	0.10	
174	50% - 120% of mass 95	310220	54.98	
175	4% - 9% of mass 174	16123	5.20	
176	93% - 101% of mass 174	306129	98.68	
177	5% - 9% of mass 176	17672	5.77	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214999 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001
Units : nL/L

Date : 06-OCT-2009 03:40
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	278_019	1209402039019	NONE	06-OCT-2009 03:40	S13093 (2X), S13044 (15X)
L2	278_020	1209402039020	NONE	06-OCT-2009 04:39	S13092 (6X), S13044 (15X)
L3	278_021	1209402039021	NONE	06-OCT-2009 05:40	S13092 (2X), S13044 (15X)
L4	278_022	1209402039022	NONE	06-OCT-2009 06:39	S13092, S13044 (15X)
L5	278_023	1209402039023	NONE	06-OCT-2009 07:39	S13091 (6X), S13044 (15X)
L6	278_024	1209402039024	NONE	06-OCT-2009 08:39	S13091 (3X), S13044 (15X)
L7	278_025	1209402039025	NONE	06-OCT-2009 09:38	S13091 (2X), S13044 (15X)
L8	278_026	1209402039026	NONE	06-OCT-2009 10:38	S13091, S13044 (15X)
L9	278_030	1209402039030	NONE	06-OCT-2009 14:38	S13093 (6X), S13044 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	2.8405	3.3043	2.8800	2.6790	3.2536	2.7319	2.6142	2.3262	3.3901	AVRG		0.34589		2.8911	12	0.99	30	
Vinyl Chloride	0.4208m	0.5795m	0.5394m	0.5316	0.6977	0.6186	0.6731	0.5454	0.3688m	AVRG		1.80906		0.5528	19	0.99	30	
Chloroethane	0.0535m	0.0761	0.0732	0.0727	0.0929	0.0737	0.0659	0.0459	0.0586m	AVRG		14.6930		0.0681	20	0.99	30	
Trichlorofluoromethane	3.5742	4.1688	3.6361	3.3806	4.0861	3.4093	3.1916	2.8640	4.5297	AVRG		0.27405		3.6489	14	0.99	30	
1,1-Dichloroethene	0.9224	1.2213	1.0764	1.0199	1.3098	1.0559	0.9810	0.7957	1.0367	AVRG		0.95551		1.0466	15	0.99	30	
Methylene Chloride	0.6289m	1.2623m	0.7372m	0.7054	1.4280	0.9114	0.9503		1.1201	AVRG		1.03311		0.9679	29	0.99	30	
Freon 113	2.6647	3.0476	2.6608	2.4612	2.8819	2.4253	2.2488	1.9144	3.2988	AVRG		0.38130		2.6226	16	0.99	30	
trans-1,2-Dichloroethene	1.7451	2.1915	1.9357	1.7717	2.2645	1.8472	1.7026	1.3654	2.1393	AVRG		0.53057		1.8848	15	0.99	30	
1,1-Dichloroethane	2.0868	2.4714	2.1346	2.0356m	2.5074	2.1759	2.1059	1.9411	2.4710	AVRG		0.45159		2.2144	10	0.99	30	
MTBE	1.0124m	1.2977	1.1781	1.1085	1.3443	1.1082	1.0351	0.8656	1.1082m	AVRG		0.89480		1.1176	13	0.99	30	
cis-1,2-Dichloroethene	1.7870	2.2028	1.8824	1.7244	2.2864	1.8581	1.7266	1.3931	2.1233	AVRG		0.52991		1.8871	15	0.99	30	
n-Hexane	0.7627	0.9403	0.8097	0.7731	0.9653	0.7782	0.7471	0.6427	0.9276	AVRG		1.22505		0.8163	13	0.99	30	
Chloroform	2.4294	2.7477	2.3978	2.1577	2.5645	2.0228	1.9130	1.5088	2.9417	AVRG		0.43513		2.2982	19	0.99	30	
1,2-Dichloroethane	0.5984	0.7249	0.6240	0.5795	0.7308	0.6501	0.5984	0.5484	0.7337	AVRG		1.55489		0.6431	11	0.99	30	
1,1,1-Trichloroethane	0.8381	0.9510	0.8170	0.7503	0.8935m	0.8025	0.7611	0.7118	0.9990	AVRG		1.19613		0.8360	11	0.99	30	
Benzene	0.4250	0.5015	0.4268	0.3964	0.4716	0.4139	0.3838	0.3454	0.5220	AVRG		2.31577		0.4318	13	0.99	30	
Carbon Tetrachloride	0.9828	1.1201	0.9721	0.9071	1.1126	0.9860	0.9275	0.8970	1.1935	AVRG		0.98915		1.0110	10	0.99	30	
1,4-Dioxane	0.0957	0.1300	0.1199	0.1300m	0.1925				0.1063m	AVRG		7.74826		0.1291	26	0.99	30	
Trichloroethene	0.4738	0.8220	0.6773	0.5859	0.5161	0.4278	0.3784m			AVRG		1.80353		0.5545	28	0.99	30	
Toluene	1.3988	1.7195	1.4640	1.4269	1.7009	1.4817	1.3702	1.2342	1.6037	AVRG		0.67164		1.4889	11	0.99	30	
Tetrachloroethene	0.5457	0.6275	0.5159	0.4729	0.5450	0.4758	0.4154	0.3541	0.6342	AVRG		1.96228		0.5096	18	0.99	30	
Ethylbenzene	1.7573	2.2065	1.8689	1.7757	2.1207	1.7156	1.5669	1.3132	1.9844	AVRG		0.55184		1.8121	15	0.99	30	
m,p-Xylenes	1.7649	2.1417m	1.7770m	1.6502m	1.9262	1.5282	1.3253m	1.1120	1.9850	AVRG		0.59170		1.6901	19	0.99	30	
o-Xylene	1.7386	1.9975	1.6749	1.5506	1.7626	1.3408	1.1776	1.0433	1.9223	AVRG		0.63344		1.5787	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.1410	2.6275	2.1521	2.0061	2.4538	1.9641	1.8206	1.5516	2.3024	AVRG		0.47320		2.1133	15	0.99	30	
1,2,4-Trimethylbenzene	1.8528	2.4939	2.1088	1.9492	2.3110	1.8994	1.6872	1.4222	1.7971	AVRG		0.51365		1.9469	17	0.99	30	
1,4-Dichlorobenzene	1.2918	1.5261	1.2552	1.2199	1.5010	1.3011	1.2117	1.1014	1.4237	AVRG		0.76067		1.3146	11	0.99	30	
Bromofluorobenzene	0.7460	0.7780	0.7557	0.7722	0.7890	0.7898	0.7709	0.7833	0.7743	AVRG		1.29326		0.7732	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	13	33.33	-6	50.00	-10	100.0	-20	0.167	17
Vinyl Chloride	0.500	**-24**	1.667	5	5.000	-2	10.00	-4	16.67	**26**	33.33	12	50.00	**22**	100.0	-1	0.167	**-33**
Chloroethane	0.500	**-21**	1.667	12	5.000	8	10.00	7	16.67	**36**	33.33	8	50.00	-3	100.0	**-33**	0.167	-14
Trichlorofluoromethane	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	12	33.33	-7	50.00	-13	100.0	**-22**	0.167	**24**
1,1-Dichloroethene	0.500	-12	1.667	17	5.000	3	10.00	-3	16.67	**25**	33.33	1	50.00	-6	100.0	**-24**	0.167	-1
Methylene Chloride	0.500	**-35**	1.667	**30**	5.000	**-24**	10.00	**-27**	16.67	**48**	33.33	-6	50.00	-2			0.167	16
Freon 113	0.500	2	1.667	16	5.000	1	10.00	-6	16.67	10	33.33	-8	50.00	-14	100.0	**-27**	0.167	**26**
trans-1,2-Dichloroethene	0.500	-7	1.667	16	5.000	3	10.00	-6	16.67	20	33.33	-2	50.00	-10	100.0	**-28**	0.167	14
1,1-Dichloroethane	0.500	-6	1.667	12	5.000	-4	10.00	-8	16.67	13	33.33	-2	50.00	-5	100.0	-12	0.167	12
MTBE	0.500	-9	1.667	16	5.000	5	10.00	-1	16.67	20	33.33	-1	50.00	-7	100.0	**-23**	0.167	-1
cis-1,2-Dichloroethene	0.500	-5	1.667	17	5.000	0	10.00	-9	16.67	**21**	33.33	-2	50.00	-9	100.0	**-26**	0.167	13
n-Hexane	0.500	-7	1.667	15	5.000	-1	10.00	-5	16.67	18	33.33	-5	50.00	-8	100.0	**-21**	0.167	14
Chloroform	0.500	6	1.667	20	5.000	4	10.00	-6	16.67	12	33.33	-12	50.00	-17	100.0	**-34**	0.167	**28**
1,2-Dichloroethane	0.500	-7	1.667	13	5.000	-3	10.00	-10	16.67	14	33.33	1	50.00	-7	100.0	-15	0.167	14
1,1,1-Trichloroethane	0.500	0	1.667	14	5.000	-2	10.00	-10	16.67	7	33.33	-4	50.00	-9	100.0	-15	0.167	19
Benzene	0.500	-2	1.667	16	5.000	-1	10.00	-8	16.67	9	33.33	-4	50.00	-11	100.0	-20	0.167	**21**
Carbon Tetrachloride	0.500	-3	1.667	11	5.000	-4	10.00	-10	16.67	10	33.33	-2	50.00	-8	100.0	-11	0.167	18
1,4-Dioxane	0.500	**-26**	1.667	1	5.000	-7	10.00	1	16.67	**49**							0.167	-18
Trichloroethene	0.500	-15	1.667	**48**	5.000	**22**	10.00	6	16.67	-7	33.33	**-23**	50.00	**-32**				
Toluene	0.500	-6	1.667	15	5.000	-2	10.00	-4	16.67	14	33.33	0	50.00	-8	100.0	-17	0.167	8
Tetrachloroethene	0.500	7	1.667	**23**	5.000	1	10.00	-7	16.67	7	33.33	-7	50.00	-18	100.0	**-31**	0.167	**24**
Ethylbenzene	0.500	-3	1.667	**22**	5.000	3	10.00	-2	16.67	17	33.33	-5	50.00	-14	100.0	**-28**	0.167	10
m,p-Xylenes	1.000	4	3.333	**27**	10.00	5	20.00	-2	33.33	14	66.67	-10	100.0	**-22**	200.0	**-34**	0.333	17
o-Xylene	0.500	10	1.667	**27**	5.000	6	10.00	-2	16.67	12	33.33	-15	50.00	**-25**	100.0	**-34**	0.167	**22**
1,3,5-Trimethylbenzene	0.500	1	1.667	**24**	5.000	2	10.00	-5	16.67	16	33.33	-7	50.00	-14	100.0	**-27**	0.167	9
1,2,4-Trimethylbenzene	0.500	-5	1.667	**28**	5.000	8	10.00	0	16.67	19	33.33	-2	50.00	-13	100.0	**-27**	0.167	-8
1,4-Dichlorobenzene	0.500	-2	1.667	16	5.000	-5	10.00	-7	16.67	14	33.33	-1	50.00	-8	100.0	-16	0.167	8
Bromofluorobenzene	10.00	-4	10.00	1	10.00	-2	10.00	0	10.00	2	10.00	2	10.00	0	10.00	1	10.00	0

SJD 10/06/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214999 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001 Cal Date : 06-OCT-2009

ICV 1209402039031 (278_031 06-OCT-2009) stds: S13086, S13044 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.813	nL/L	-2	30	
Vinyl Chloride	10.00	10.60	nL/L	6	30	m
Chloroethane	10.00	10.99	nL/L	10	30	
Trichlorofluoromethane	10.00	9.671	nL/L	-3	30	
1,1-Dichloroethene	10.00	10.58	nL/L	6	30	
Methylene Chloride	10.00	7.287	nL/L	**-27**	30	!v-
Freon 113	10.00	10.31	nL/L	3	30	
trans-1,2-Dichloroethene	10.00	9.859	nL/L	-1	30	
1,1-Dichloroethane	10.00	9.627	nL/L	-4	30	
MTBE	10.00	10.22	nL/L	2	30	
cis-1,2-Dichloroethene	10.00	9.793	nL/L	-2	30	
n-Hexane	10.00	9.975	nL/L	0	30	
Chloroform	10.00	10.20	nL/L	2	30	
1,2-Dichloroethane	10.00	9.524	nL/L	-5	30	
1,1,1-Trichloroethane	10.00	9.886	nL/L	-1	30	
Benzene	10.00	9.859	nL/L	-1	30	
Carbon Tetrachloride	10.00	9.546	nL/L	-5	30	
1,4-Dioxane	10.00	9.502	nL/L	-5	30	
Trichloroethene	10.00	8.640	nL/L	-14	30	
Toluene	10.00	9.721	nL/L	-3	30	
Tetrachloroethene	10.00	9.095	nL/L	-9	30	
Ethylbenzene	10.00	10.05	nL/L	0	30	
m,p-Xylenes	20.00	19.74	nL/L	-1	30	m
o-Xylene	10.00	9.758	nL/L	-2	30	
1,3,5-Trimethylbenzene	10.00	9.827	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	10.02	nL/L	0	30	
1,4-Dichlorobenzene	10.00	9.097	nL/L	-9	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214999 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC515614 IDF : 1.0
Seqnum : 1209404057002.1 File : 280_002 Time : 07-OCT-2009 15:21
Cal : 1209402039001 Caldate : 06-OCT-2009
Standards: S13086, S13044 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.8911	2.7186	10.00	9.406	nL/L	-6	30	u
Vinyl Chloride	0.5528	0.5070	10.00	9.174	nL/L	-8	30	u
Chloroethane	0.0681	0.0738	10.00	10.85	nL/L	8	30	u
Trichlorofluoromethane	3.6489	3.4310	10.00	9.405	nL/L	-6	30	u
1,1-Dichloroethene	1.0466	1.0946	10.00	10.46	nL/L	5	30	u
Methylene Chloride	0.9679	0.6869	10.00	7.098	nL/L	-29	30	!v- u
Freon 113	2.6226	2.4877	10.00	9.490	nL/L	-5	30	u
trans-1,2-Dichloroethene	1.8848	1.8004	10.00	9.558	nL/L	-4	30	u
1,1-Dichloroethane	2.2144	2.0869	10.00	9.426	nL/L	-6	30	u
MTBE	1.1176	1.1437	10.00	10.24	nL/L	2	30	u
cis-1,2-Dichloroethene	1.8871	1.8440	10.00	9.775	nL/L	-2	30	u
n-Hexane	0.8163	0.8206	10.00	10.06	nL/L	1	30	u
Chloroform	2.2982	2.2971	10.00	9.999	nL/L	0	30	u
1,2-Dichloroethane	0.6431	0.6120	10.00	9.517	nL/L	-5	30	u
1,1,1-Trichloroethane	0.8360	0.8178	10.00	9.786	nL/L	-2	30	u
Benzene	0.4318	0.4292	10.00	9.940	nL/L	-1	30	u
Carbon Tetrachloride	1.0110	0.9758	10.00	9.657	nL/L	-3	30	u
1,4-Dioxane	0.1291	0.1289	10.00	9.994	nL/L	0	30	m u
Trichloroethene	0.5545	0.4794	10.00	8.645	nL/L	-14	30	u
Toluene	1.4889	1.4352	10.00	9.640	nL/L	-4	30	u
Tetrachloroethene	0.5096	0.4585	10.00	8.996	nL/L	-10	30	u
Ethylbenzene	1.8121	1.8131	10.00	10.01	nL/L	0	30	u
m,p-Xylenes	1.6901	1.6844	20.00	19.93	nL/L	0	30	m u
o-Xylene	1.5787	1.5482	10.00	9.809	nL/L	-2	30	u
1,3,5-Trimethylbenzene	2.1133	2.0270	10.00	9.592	nL/L	-4	30	u
1,2,4-Trimethylbenzene	1.9469	1.9880	10.00	10.21	nL/L	2	30	u
1,4-Dichlorobenzene	1.3146	1.2103	10.00	9.209	nL/L	-8	30	u
Bromofluorobenzene	0.7732	0.7674	10.00	9.923	nL/L	-1	30	u

ISTD (ICAL 278_025)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	924937	918113	-0.74	27.18	27.20	0.02
1,4-Difluorobenzene	3256000	3227000	-0.89	31.90	31.93	0.03
Chlorobenzene-d5	2877000	3001000	4.31	41.76	41.79	0.03

BO 10/07/09 [1,4-Dioxane]: Picked or reassigned peak . [general version]

BO 10/07/09 [m,p-Xylenes]: Combined split peak . [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214999 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC515777 IDF : 1.0
Seqnum : 1209405420003.1 File : 281_003 Time : 08-OCT-2009 15:03
Cal : 1209402039001 Caldate : 06-OCT-2009
Standards: S13086, S13044 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.8911	2.8100	10.00	9.722	nL/L	-3	30	u
Vinyl Chloride	0.5528	0.6004	10.00	10.86	nL/L	9	30	u
Chloroethane	0.0681	0.0748	10.00	11.00	nL/L	10	30	u
Trichlorofluoromethane	3.6489	3.5043	10.00	9.608	nL/L	-4	30	u
1,1-Dichloroethene	1.0466	1.1069	10.00	10.58	nL/L	6	30	u
Methylene Chloride	0.9679	0.7357	10.00	7.603	nL/L	-24	30	!v- u
Freon 113	2.6226	2.5185	10.00	9.608	nL/L	-4	30	u
trans-1,2-Dichloroethene	1.8848	1.8407	10.00	9.766	nL/L	-2	30	u
1,1-Dichloroethane	2.2144	2.1455	10.00	9.689	nL/L	-3	30	u
MTBE	1.1176	1.1476	10.00	10.27	nL/L	3	30	u
cis-1,2-Dichloroethene	1.8871	1.8737	10.00	9.931	nL/L	-1	30	u
n-Hexane	0.8163	0.8263	10.00	10.13	nL/L	1	30	u
Chloroform	2.2982	2.3116	10.00	10.06	nL/L	1	30	u
1,2-Dichloroethane	0.6431	0.6056	10.00	9.421	nL/L	-6	30	u
1,1,1-Trichloroethane	0.8360	0.8177	10.00	9.784	nL/L	-2	30	u
Benzene	0.4318	0.4245	10.00	9.838	nL/L	-2	30	u
Carbon Tetrachloride	1.0110	0.9572	10.00	9.472	nL/L	-5	30	u
1,4-Dioxane	0.1291	0.1210	10.00	9.376	nL/L	-6	30	u
Trichloroethene	0.5545	0.4716	10.00	8.505	nL/L	-15	30	u
Toluene	1.4889	1.4360	10.00	9.648	nL/L	-4	30	u
Tetrachloroethene	0.5096	0.4740	10.00	9.307	nL/L	-7	30	u
Ethylbenzene	1.8121	1.8292	10.00	10.10	nL/L	1	30	u
m,p-Xylenes	1.6901	1.6811	20.00	19.89	nL/L	-1	30	u
o-Xylene	1.5787	1.5824	10.00	10.03	nL/L	0	30	u
1,3,5-Trimethylbenzene	2.1133	2.0337	10.00	9.626	nL/L	-4	30	u
1,2,4-Trimethylbenzene	1.9469	1.9626	10.00	10.08	nL/L	1	30	u
1,4-Dichlorobenzene	1.3146	1.2041	10.00	9.163	nL/L	-8	30	u
Bromofluorobenzene	0.7732	0.7598	10.00	9.828	nL/L	-2	30	u

ISTD (ICAL 278_025)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	924937	908882	-1.74	27.18	27.18	0.00
1,4-Difluorobenzene	3256000	3291000	1.07	31.90	31.91	0.01
Chlorobenzene-d5	2877000	2998000	4.21	41.76	41.76	0.00

!=warning -=low bias u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209404057

Date : 10/07/09 Reference : 278_025
Sequence : MSAIR01 280 Analyzed : 10/06/09 09:38

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	924937	27.18	3256000	31.90	2877000	41.76
		LOWER LIMIT	554962	26.85	1953600	31.57	1726200	41.43
		UPPER LIMIT	1294912	27.51	4558400	32.23	4027800	42.09
002	CCV/BS	QC515614	918113	27.20	3227000	31.93	3001000	41.79
003	BSD	QC515615	904655	27.20	3305000	31.93	2962000	41.79
004	BLANK	QC515616	911241	27.21	3203000	31.94	2931000	41.79
005	SAMPLE	214999-005	910357	27.21	3297000	31.93	2863000	41.80
006	SAMPLE	214999-006	927616	27.20	3323000	31.93	2730000	41.79
007	SAMPLE	214999-007	938818	27.20	3336000	31.93	2840000	41.79
008	SAMPLE	214999-001	945638	27.18	3353000	31.91	2789000	41.77
009	SAMPLE	214999-002	929163	27.19	3324000	31.91	2835000	41.77
010	SAMPLE	214999-003	924807	27.19	3355000	31.91	2772000	41.77
011	SAMPLE	214999-004	961967	27.19	3431000	31.92	2400000	41.78
012	SAMPLE	215048-001	963688	27.19	3461000	31.92	2708000	41.77
013	SAMPLE	214999-003	988617	27.19	3544000	31.91	2832000	41.77
014	SAMPLE	214999-004	980509	27.19	3491000	31.91	2478000	41.77
015	SAMPLE	215048-001	934789	27.19	3498000	31.92	2593000	41.77

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209405420

Date : 10/08/09 Reference : 278_025
Sequence : MSAIR01 281 Analyzed : 10/06/09 09:38

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	924937	27.18	3256000	31.90	2877000	41.76
		LOWER LIMIT	554962	26.85	1953600	31.57	1726200	41.43
		UPPER LIMIT	1294912	27.51	4558400	32.23	4027800	42.09
003	CCV/BS	QC515777	908882	27.18	3291000	31.91	2998000	41.76
004	BSD	QC515778	889722	27.18	3238000	31.90	2980000	41.76
005	BLANK	QC515779	905685	27.19	3261000	31.91	2948000	41.76
006	SAMPLE	214999-001	913843	27.18	3269000	31.91	2820000	41.76
007	SAMPLE	214999-002	914768	27.18	3295000	31.91	2867000	41.76

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209402039

Instrument : MSAIR01 Begun : 10/05/09 09:34
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	278_001	X	BFB			10/05/09 09:34	1.0	1	
002	278_002	X	QC515024	Air	155636	10/05/09 10:34	1.0	2 1	
003	278_003	X	QC515025	Air	155636	10/05/09 11:34	1.0	2 1	
004	278_004	X	NONE			10/05/09 12:33	1.0	1	
005	278_005	X	CALIB IB			10/05/09 13:33	1.0	1	
006	278_006	X	NONE			10/05/09 14:33	1.0	3 1	
007	278_007	X	NONE			10/05/09 15:32	1.0	3 1	
008	278_008	X	NONE			10/05/09 16:32	1.0	4 1	
009	278_009	X	NONE			10/05/09 17:33	1.0	4 1	
010	278_010	X	NONE			10/05/09 18:32	1.0	4 1	
011	278_011	X	NONE			10/05/09 19:32	1.0	5 1	
012	278_012	X	NONE			10/05/09 20:32	1.0	5 1	
013	278_013	X	NONE			10/05/09 21:32	1.0	5 1	
014	278_014	X	NONE			10/05/09 22:31	1.0	5 1	
015	278_015	TUN	BFB			10/05/09 23:31	1.0	1	
016	278_016	X	NONE			10/06/09 00:30	1.0	2 1	
017	278_017	IB	CALIB IB			10/06/09 01:41	1.0	1	
018	278_018	X	NONE			10/06/09 02:40	1.0	3 1	
019	278_019	ICAL	NONE			10/06/09 03:40	1.0	3 1	
020	278_020	ICAL	NONE			10/06/09 04:39	1.0	4 1	
021	278_021	ICAL	NONE			10/06/09 05:40	1.0	4 1	
022	278_022	ICAL	NONE			10/06/09 06:39	1.0	4 1	
023	278_023	ICAL	NONE			10/06/09 07:39	1.0	5 1	
024	278_024	ICAL	NONE			10/06/09 08:39	1.0	5 1	
025	278_025	ICAL	NONE			10/06/09 09:38	1.0	5 1	
026	278_026	ICAL	NONE			10/06/09 10:38	1.0	5 1	
027	278_027	IB	NONE			10/06/09 11:38	1.0	1	
028	278_028	XICV	NONE			10/06/09 12:38	1.0	2 1	
029	278_029	IB	NONE			10/06/09 13:38	1.0	1	
030	278_030	ICAL	NONE			10/06/09 14:38	1.0	3 1	
031	278_031	ICV	NONE			10/06/09 15:39	1.0	2 1	

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

BO 10/07/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: SJD Date: 10/06/09 Reviewer: BO Date: 10/07/09

Standards used: 1=S13044 2=S13086 3=S13093 4=S13092 5=S13091

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209404057

Instrument : MSAIR01 Begun : 10/07/09 14:17
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	280_001	TUN	BFB			10/07/09 14:17	1.0	1	
002	280_002	CCV/BS	QC515614	Air	155785	10/07/09 15:21	1.0	2 1	
003	280_003	BSD	QC515615	Air	155785	10/07/09 16:21	1.0	2 1	
004	280_004	BLANK	QC515616	Air	155785	10/07/09 17:20	1.0	1	
005	280_005	SAMPLE	214999-005	Air	155785	10/07/09 18:20	2.06	1	
006	280_006	SAMPLE	214999-006	Air	155785	10/07/09 19:20	2.07	1	
007	280_007	SAMPLE	214999-007	Air	155785	10/07/09 20:20	2.11	1	
008	280_008	SAMPLE	214999-001	Air	155785	10/07/09 21:20	26.64	1	1:TCE=61
009	280_009	SAMPLE	214999-002	Air	155785	10/07/09 22:21	26.64	1	1:TCE=89
010	280_010	SAMPLE	214999-003	Air	155785	10/07/09 23:22	27.60	1	
011	280_011	SAMPLE	214999-004	Air	155785	10/08/09 00:23	259.2	1	
012	280_012	SAMPLE	215048-001	Air	155785	10/08/09 01:23	265.2	1	
013	280_013	SAMPLE	214999-003	Air	155785	10/08/09 08:29	13.80	1	
014	280_014	SAMPLE	214999-004	Air	155785	10/08/09 09:30	129.6	1	
015	280_015	SAMPLE	215048-001	Air	155785	10/08/09 10:29	132.6	1	

SJD 10/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 15.

BO 10/12/09 : Matrix spikes were not performed for this analysis in batch 155785 because they are not required by the method.

Analyst: SJD Date: 10/12/09 Reviewer: BO Date: 10/12/09

Standards used: 1=S13044 2=S13086

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209405420

Instrument : MSAIR01 Begun : 10/08/09 13:00
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	281_001	X	IB			10/08/09 13:00	1.0	1
002	281_002	TUN	BFB			10/08/09 14:01	1.0	1
003	281_003	CCV/BS	QC515777	Air	155830	10/08/09 15:03	1.0	2 1
004	281_004	BSD	QC515778	Air	155830	10/08/09 16:03	1.0	2 1
005	281_005	BLANK	QC515779	Air	155830	10/08/09 17:03	1.0	1
006	281_006	SAMPLE	214999-001	Air	155830	10/08/09 18:04	44.40	1
007	281_007	SAMPLE	214999-002	Air	155830	10/08/09 19:04	88.80	1

SJD 10/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

BO 10/12/09 : Matrix spikes were not performed for this analysis in batch 155830 because they are not required by the method.

Analyst: SJD Date: 10/12/09 Reviewer: BO Date: 10/12/09

Standards used: 1=S13044 2=S13086

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PROJECT _____

Continued From Page _____

~~Property Date~~	Sample ID	Can ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23 MAP	214897-005	C00014	1.5 added	30.00	42.6x	20x of 2.13 x C00110
↓	006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
Soil 9/26/09	214998-001	C00049	10.30	23.31	2.26x	
	-002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00058	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	-007	C00147	11.18	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.13	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	-014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1703	—	—	1x	
Soil 10/6/09	214897-009	C00017	1.5 added	30.0 total	42.2x	20x of 2.11x can C00062
	214999-004	C00212	1.5 added	30.0 total	43.2x	20x of 2.16x can C00052
	215048-001	C00220	1.5 added	30.0 total	44.2x	20x of 2.21x can C00140
↓	BLANK	C1705	—	—	1x	
Soil 10/8/09	214999-1	C00045	3.0 added	30.0 total	22.2x	10x of 2.22x can C00064
	-2	C00213	1.5 added	30.0 total	44.4x	20x of 2.22x can C00124
↓	BLANK	C00227	—	—	1x	

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Notebook No. _____

PROJECT _____ Continued From Page _____

~~Analyzed~~ Date	Sample ID	Can ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23/09 AAP	214897-005	C00014	1.5 added	30.0	42.6x	20x of 2.13 x C00110
↓	006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
Soo 9/26/09	214998-001	C00049	10.30	23.31	2.26x	
	-002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00055	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	-007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.18	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	-014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1703	—	—	1x	
Soo 10/6/09	214897-009	C00017	1.5 added	30.0 total	42.2x	20x of 2.11x can C00062
	214999-004	C00212	1.5 added	30.0 total	43.2x	20x of 2.16x can C00052
	215048-001	C00220	1.5 added	30.0 total	44.2x	20x of 2.21x can C00140
↓	BLANK	C1705	—	—	1x	
10/8/09	214999 -1	C00045	3.0 added	30.0 total	22.2x	10x of 2.22x can C00064
	-2	C00213	1.5 added	30.0 total	44.4x	20x of 2.22x can C00124
↓	BLANK	C00227	—	—	1x	

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Laboratory Job Number 214999

ANALYTICAL REPORT

Volatile Organics in Air GC

Matrix: Air

Curtis & Tompkins, Ltd.

Analysis of Reformed Gas

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Matrix:	Air	Batch#:	155375
Units:	ppmv	Sampled:	09/14/09
Units (M) :	ug/L	Received:	09/16/09

Field ID:	PMW-9-M-9Q3	Diln Fac:	2.060
Type:	SAMPLE	Analyzed:	09/29/09
Lab ID:	214999-005		

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	7,600	4,100	14,000	7,400	D1
Oxygen	180,000	4,100	240,000	5,400	D1
Methane	ND	21	ND	14	D1

Field ID:	PMW-9-U-9Q3	Diln Fac:	2.070
Type:	SAMPLE	Analyzed:	09/29/09
Lab ID:	214999-006		

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	15,000	4,100	27,000	7,500	D1
Oxygen	180,000	4,100	230,000	5,400	D1
Methane	ND	21	ND	14	D1

Field ID:	BSVE-SVM-9Q3-002	Diln Fac:	2.110
Type:	SAMPLE	Analyzed:	09/29/09
Lab ID:	214999-007		

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Carbon Dioxide	7,500	4,200	13,000	7,600	D1
Oxygen	180,000	4,200	240,000	5,500	D1
Methane	ND	21	ND	14	D1

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513933	Analyzed:	09/28/09
Result (M):	ND		

Analyte	Result	RL	RL	ADEQ Flags
Carbon Dioxide	ND	2,000	3,600	
Oxygen	ND	2,000	2,600	
Methane	ND	10	6.6	

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Sampled:	09/14/09
Units (M):	ug/L	Received:	09/16/09

Field ID:	PMW-9-M-9Q3	Diln Fac:	2.060
Type:	SAMPLE	Analyzed:	09/29/09
Lab ID:	214999-005		

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	ND	1.0	ND	0.68	D1
C1-C2 as Ethane	ND	2.1	ND	2.5	D1
C2-C3 as Propane	ND	2.1	ND	3.7	D1
C3-C4 as n-Butane	ND	2.1	ND	4.9	D1
C4-C5 as n-Pentane	ND	2.1	ND	6.1	D1
C5-C6 as n-Hexane	14	2.1	48	7.3	D1
C6+ as n-Hexane	42	2.1	150	7.3	D1

Field ID:	PMW-9-U-9Q3	Result (M):	ND
Type:	SAMPLE	Diln Fac:	2.070
Lab ID:	214999-006	Analyzed:	09/29/09

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	1.0	0.68	D1
C1-C2 as Ethane	ND	2.1	2.5	D1
C2-C3 as Propane	ND	2.1	3.7	D1
C3-C4 as n-Butane	ND	2.1	4.9	D1
C4-C5 as n-Pentane	ND	2.1	6.1	D1
C5-C6 as n-Hexane	ND	2.1	7.3	D1
C6+ as n-Hexane	ND	2.1	7.3	D1

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Sampled:	09/14/09
Units (M):	ug/L	Received:	09/16/09

Field ID:	BSVE-SVM-9Q3-002	Result (M):	ND
Type:	SAMPLE	Diln Fac:	2.110
Lab ID:	214999-007	Analyzed:	09/29/09

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	1.1	0.69	D1
C1-C2 as Ethane	ND	2.1	2.6	D1
C2-C3 as Propane	ND	2.1	3.8	D1
C3-C4 as n-Butane	ND	2.1	5.0	D1
C4-C5 as n-Pentane	ND	2.1	6.2	D1
C5-C6 as n-Hexane	ND	2.1	7.4	D1
C6+ as n-Hexane	ND	2.1	7.4	D1

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513933	Analyzed:	09/28/09
Result (M):	ND		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	0.50	0.33	
C1-C2 as Ethane	ND	1.0	1.2	
C2-C3 as Propane	ND	1.0	1.8	
C3-C4 as n-Butane	ND	1.0	2.4	
C4-C5 as n-Pentane	ND	1.0	3.0	
C5-C6 as n-Hexane	ND	1.0	3.5	
C6+ as n-Hexane	ND	1.0	3.5	

ND= Not Detected
RL= Reporting Limit
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Matrix:	Air	Batch#:	155375
Units:	ppmv	Analyzed:	09/28/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513934

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Methane-TO3	100.0	101.9	102	70-130	
C1-C2 as Ethane	100.0	100.7	101	70-130	
C2-C3 as Propane	100.0	98.45	98	70-130	
C3-C4 as n-Butane	100.0	100.1	100	70-130	
C4-C5 as n-Pentane	100.0	102.0	102	70-130	
C5-C6 as n-Hexane	100.0	100.8	101	70-130	

Type: BSD Lab ID: QC513935

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Methane-TO3	100.0	95.78	96	70-130	6	20	
C1-C2 as Ethane	100.0	94.76	95	70-130	6	20	
C2-C3 as Propane	100.0	92.67	93	70-130	6	20	
C3-C4 as n-Butane	100.0	94.07	94	70-130	6	20	
C4-C5 as n-Pentane	100.0	95.89	96	70-130	6	20	
C5-C6 as n-Hexane	100.0	94.92	95	70-130	6	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Analysis of Reformed Gas

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Field ID:	SMW-2-M-9Q3	Units (M) :	ug/L
Type:	SDUP	Diln Fac:	3.110
MSS Lab ID:	214904-001	Batch#:	155375
Lab ID:	QC513936	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Carbon Dioxide	33,700	33,630	6,220	60,540	11,200	0	30	D1
Oxygen	161,700	160,600	6,220	210,200	8,141	1	30	D1
Methane	<31.10	ND	31.10	ND	20.41	NC	30	D1

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Field ID:	SMW-2-M-9Q3	Units (M):	ug/L
Type:	SDUP	Diln Fac:	3.110
MSS Lab ID:	214904-001	Batch#:	155375
Lab ID:	QC513936	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result		RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Methane-TO3	3.677	3.534		1.555	2.318	1.020	4	30	D1
C1-C2 as Ethane	<3.110	ND		3.110	ND	3.825	NC	30	D1
C2-C3 as Propane	<3.110	ND		3.110	ND	5.609	NC	30	D1
C3-C4 as n-Butane	<3.110	ND		3.110	ND	7.393	NC	30	D1
C4-C5 as n-Pentane	<3.110	ND		3.110	ND	9.177	NC	30	D1
C5-C6 as n-Hexane	<3.110	ND		3.110	ND	10.96	NC	30	D1
C6+ as n-Hexane	<3.110	ND		3.110	ND	10.96	NC	30	D1

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Analysis of Reformed Gas

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513938	Batch#:	155375
Matrix:	Air	Analyzed:	09/28/09
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Carbon Dioxide	10,000	10,010	100	70-130	
Oxygen	10,000	9,772	98	70-130	
Methane	10,000	9,953	100	70-130	

Curtis & Tompkins, Ltd.

Batch QC Report

Analysis of Reformed Gas

Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	EPA 1946
Project#:	HONEYWELL AIR	Analysis:	ASTM D1946
Field ID:	BSVE-INLET-9Q3	Units (M) :	ug/L
Type:	SDUP	Diln Fac:	2.070
MSS Lab ID:	214904-003	Batch#:	155375
Lab ID:	QC513939	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Carbon Dioxide	57,780	57,690	4,140	103,800	7,452	0	30	D1
Oxygen	120,100	119,500	4,140	156,400	5,418	1	30	D1
Methane	6,878	6,850	20.70	4,494	13.58	0	30	D1

RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

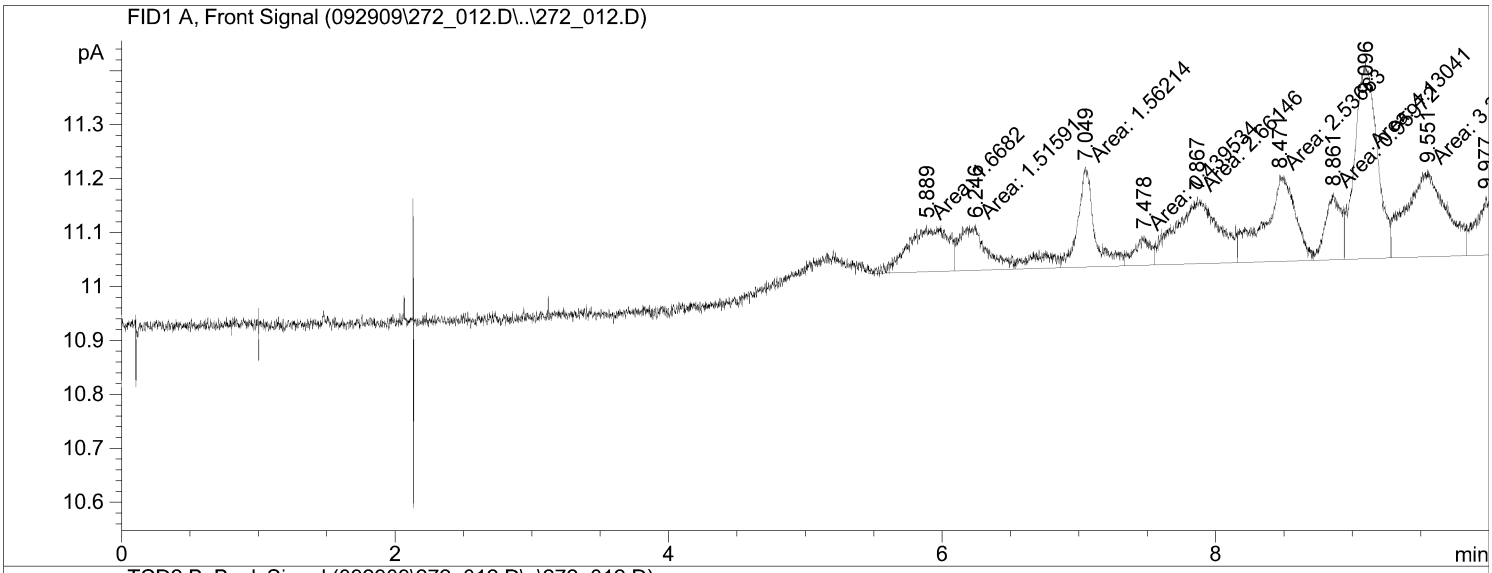
Lab #:	214999	Location:	BSVE Permit
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-3
Field ID:	BSVE-INLET-9Q3	Units (M):	ug/L
Type:	SDUP	Diln Fac:	2.070
MSS Lab ID:	214904-003	Batch#:	155375
Lab ID:	QC513939	Sampled:	09/13/09
Matrix:	Air	Received:	09/15/09
Units:	ppmv	Analyzed:	09/28/09

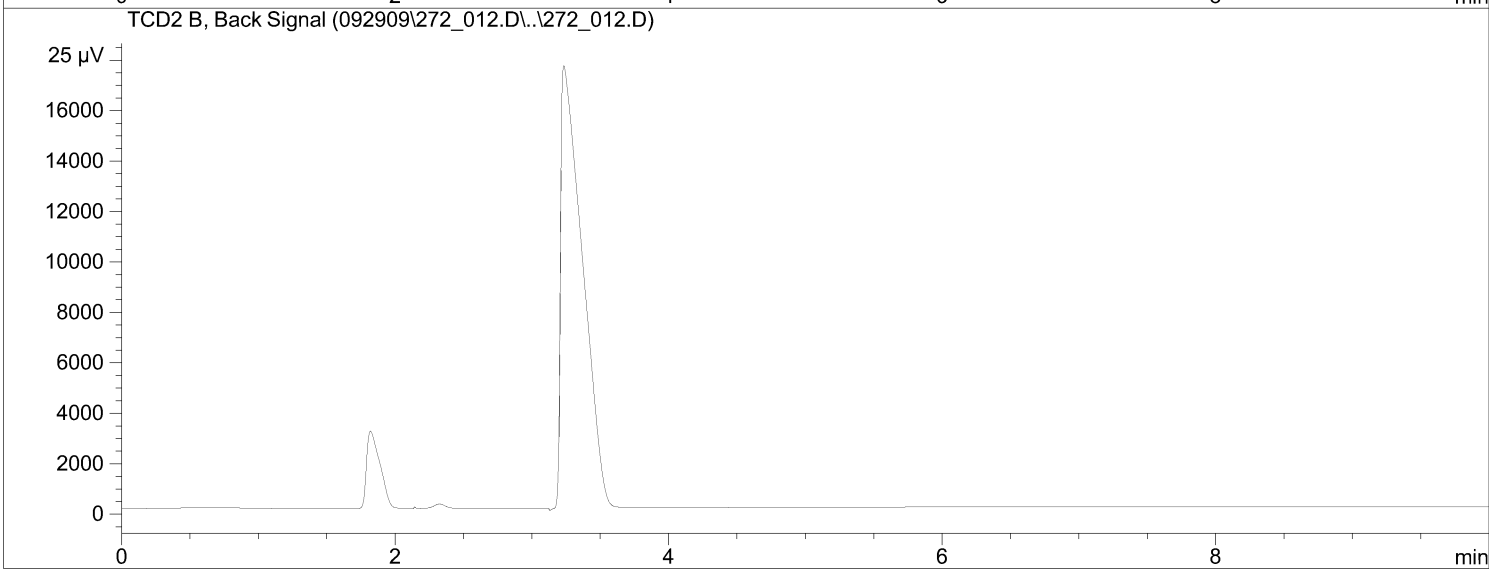
Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ Flags
Methane-TO3	6,593	6,567	1.035	4,308	0.6790	0	30	D1
C1-C2 as Ethane	<2.070	ND	2.070	ND	2.546	NC	30	D1
C2-C3 as Propane	<2.070	ND	2.070	ND	3.734	NC	30	D1
C3-C4 as n-Butane	4.480	4.155	2.070	9.877	4.921	8	30	D1
C4-C5 as n-Pentane	37.04	36.95	2.070	109.0	6.108	0	30	D1
C5-C6 as n-Hexane	151.2	151.0	2.070	532.2	7.296	0	30	D1
C6+ as n-Hexane	298.5	365.1	2.070	1,287	7.296	20	30	D1

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit
RPD= Relative Percent Difference
Result M= Result in Mass Units

Data File C:\CHEM32\1\DATA\092909\272_012.D\..\272_012.D
Sample Name: 214999-005,155375,2.06

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 12:03:36 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 12:03:34 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_100509.M
Last changed : 10/5/2009 05:02:55 PM by GC28 RGA
(Results are from a previously saved Batch)





==========
External Standard Report
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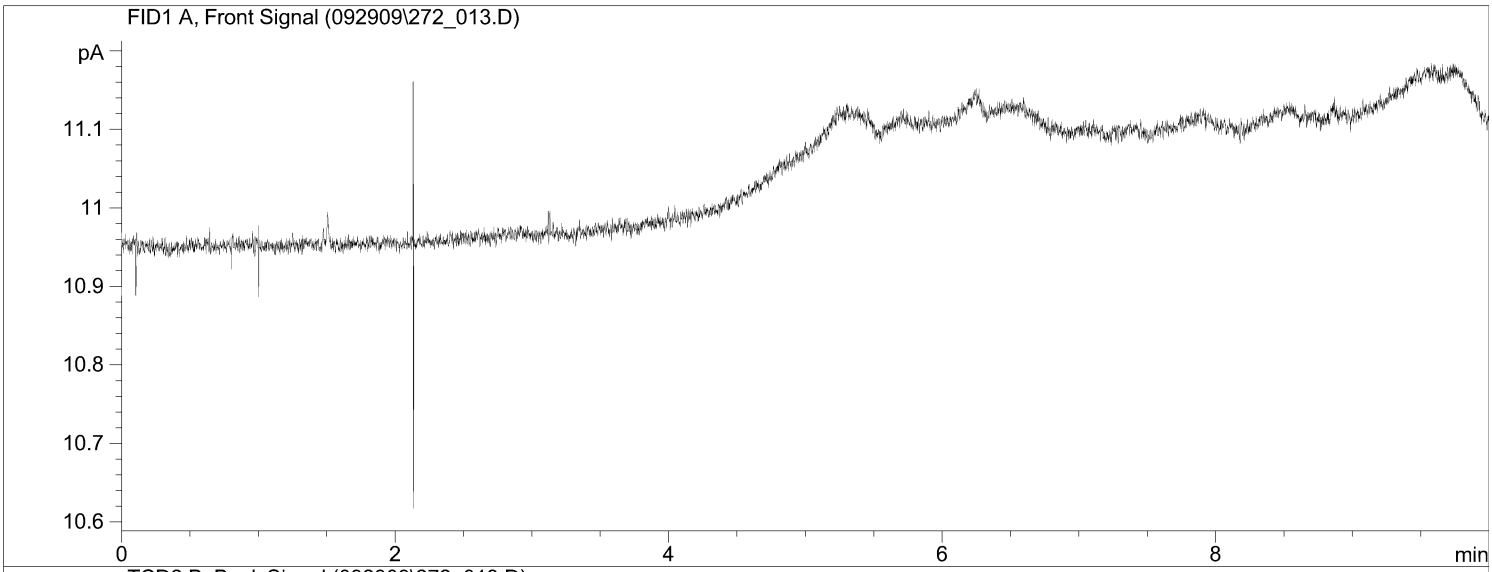
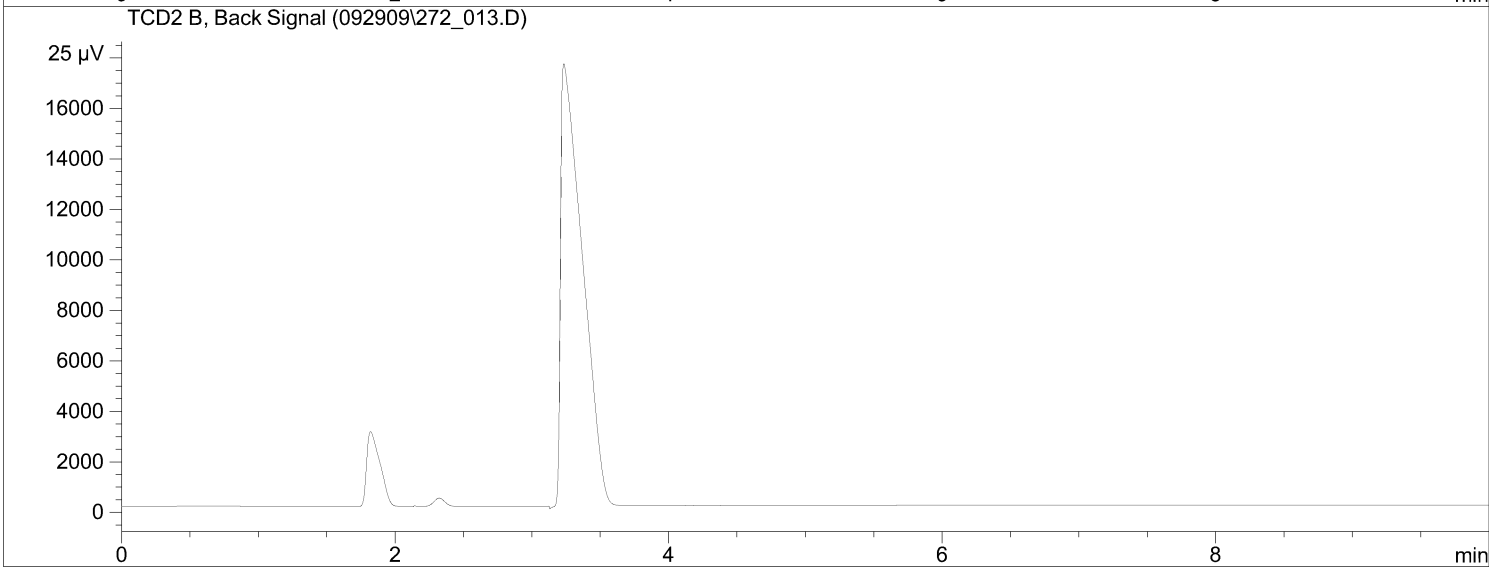
Sorted By : Signal
Calib. Data Modified : 10/5/2009 04:58:32 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Data File C:\CHEM32\1\DATA\092909\272_013.D
Sample Name: 214999-006,155375,2.07

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 12:24:57 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 12:18:42 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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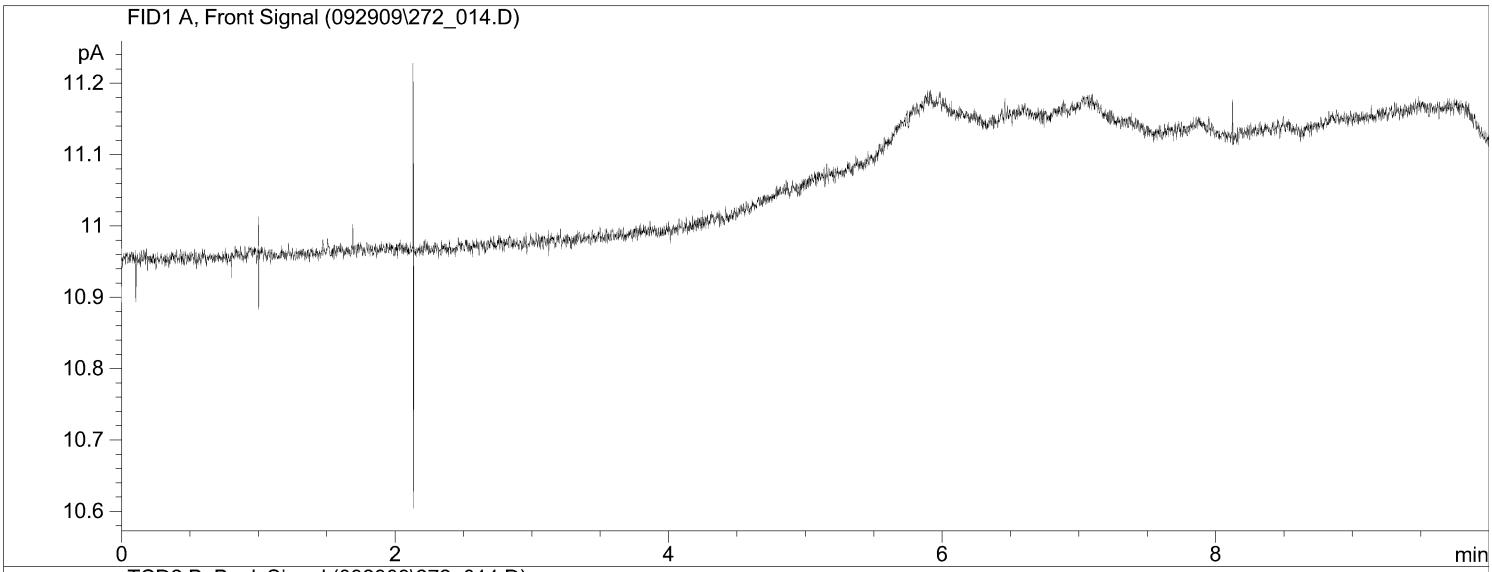
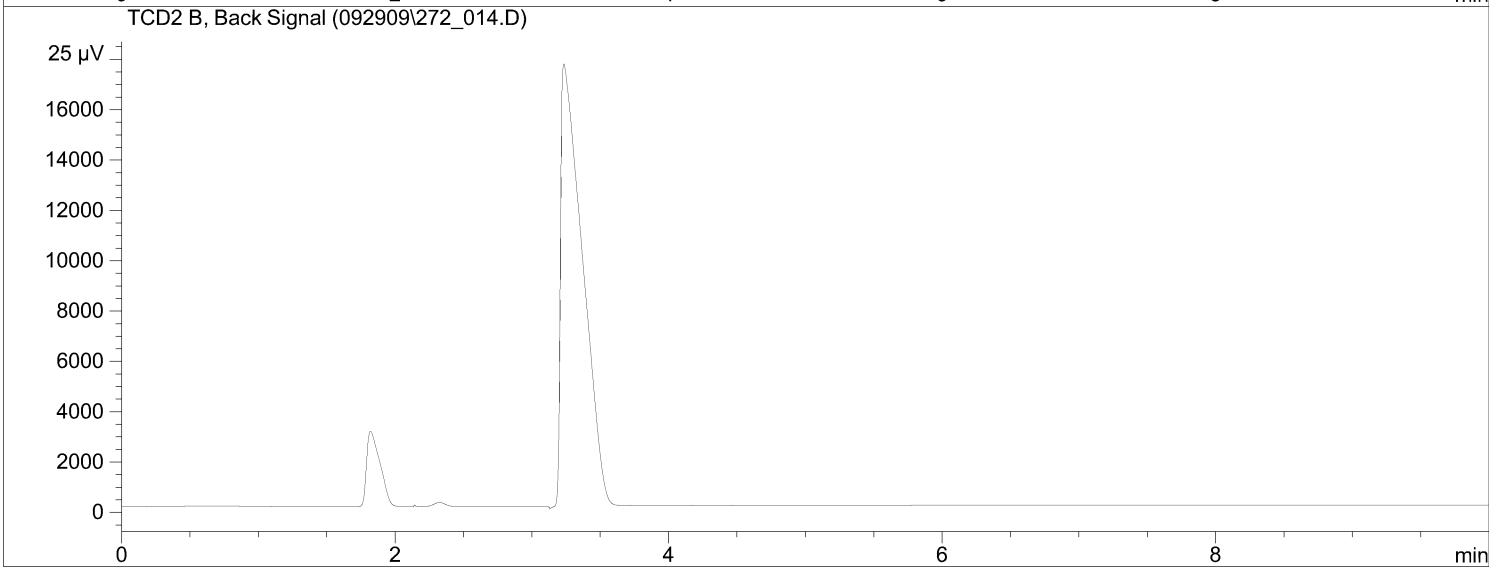
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092909\272_014.D
Sample Name: 214999-007,155375,2.11

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/29/2009 12:51:54 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_092809.M
Last changed : 9/29/2009 12:51:51 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





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External Standard Report
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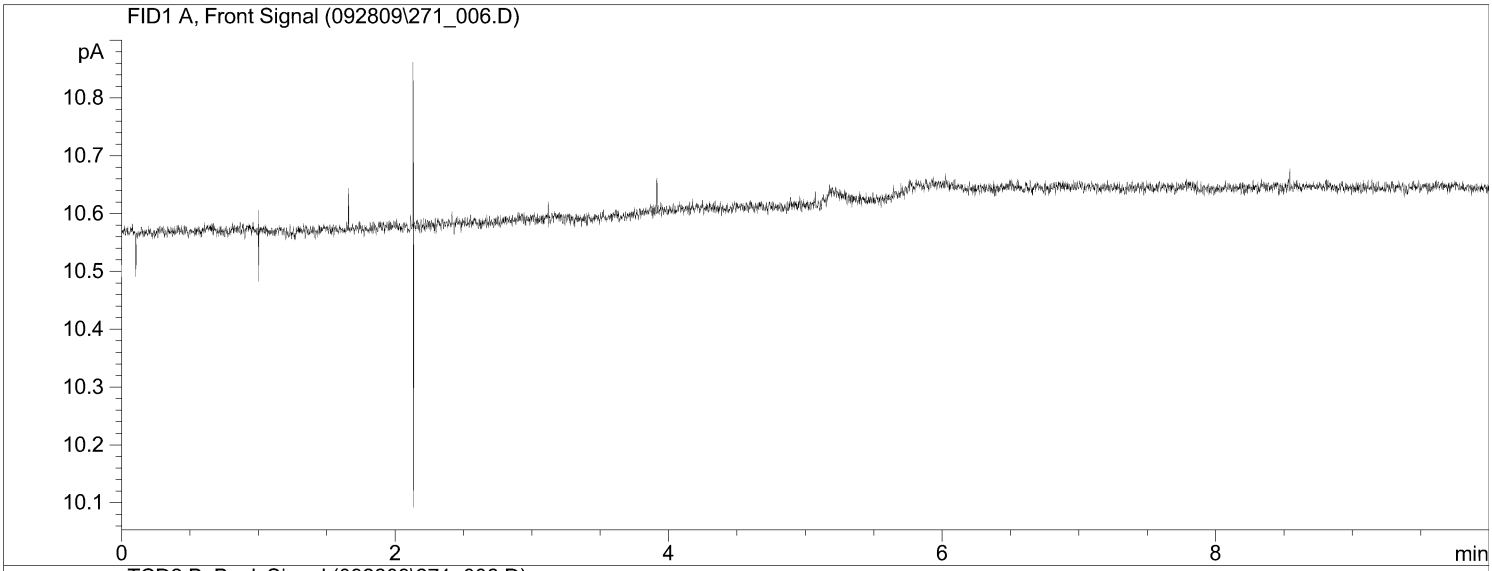
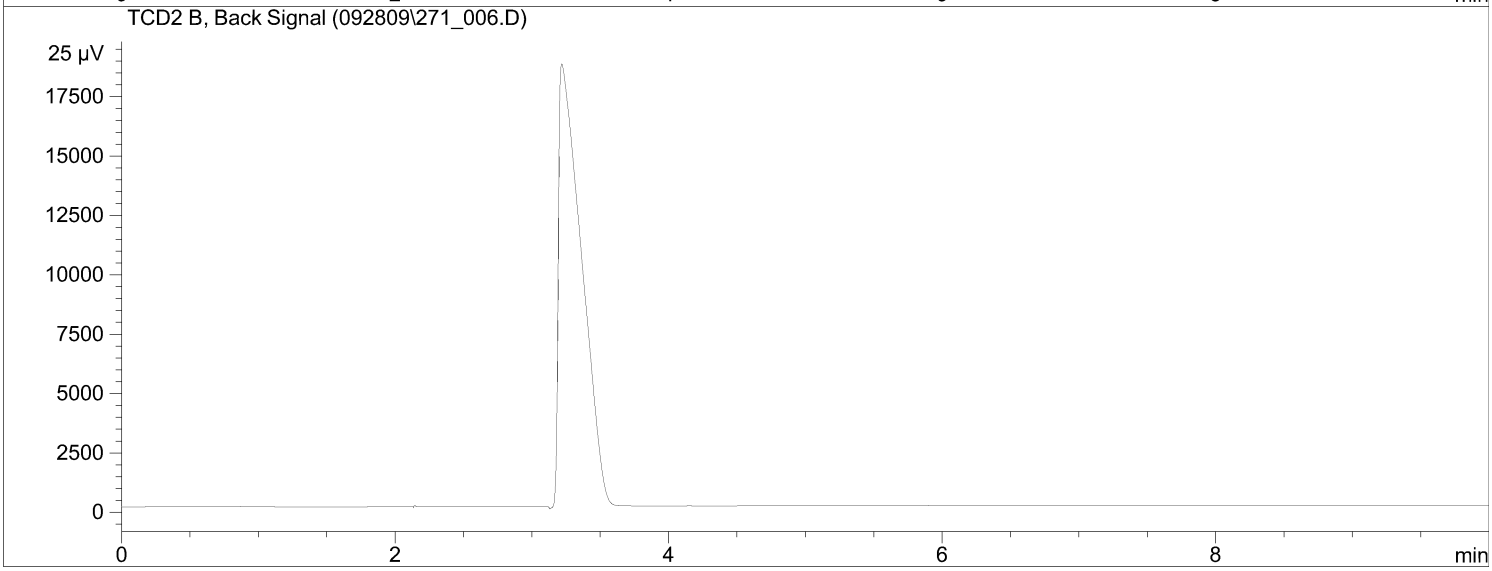
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_006.D
Sample Name: mb,qc513933,155375,1

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 11:25:11 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_090209.M
Last changed : 9/28/2009 11:15:21 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





==========
External Standard Report
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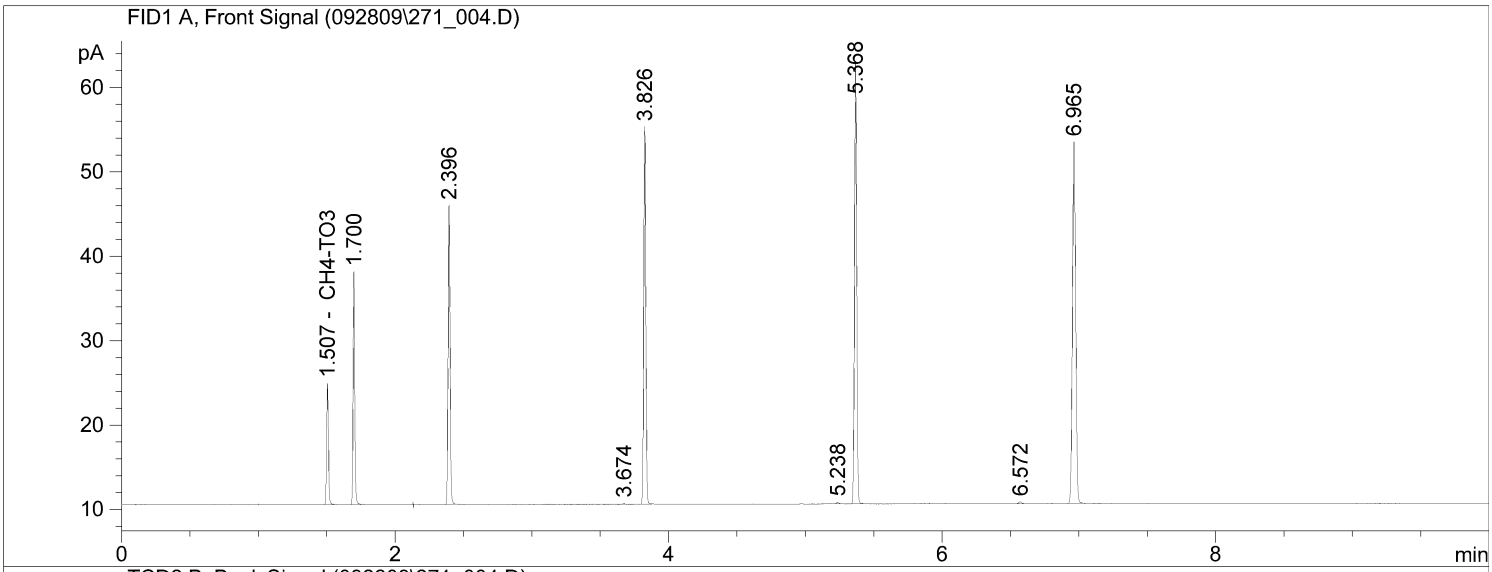
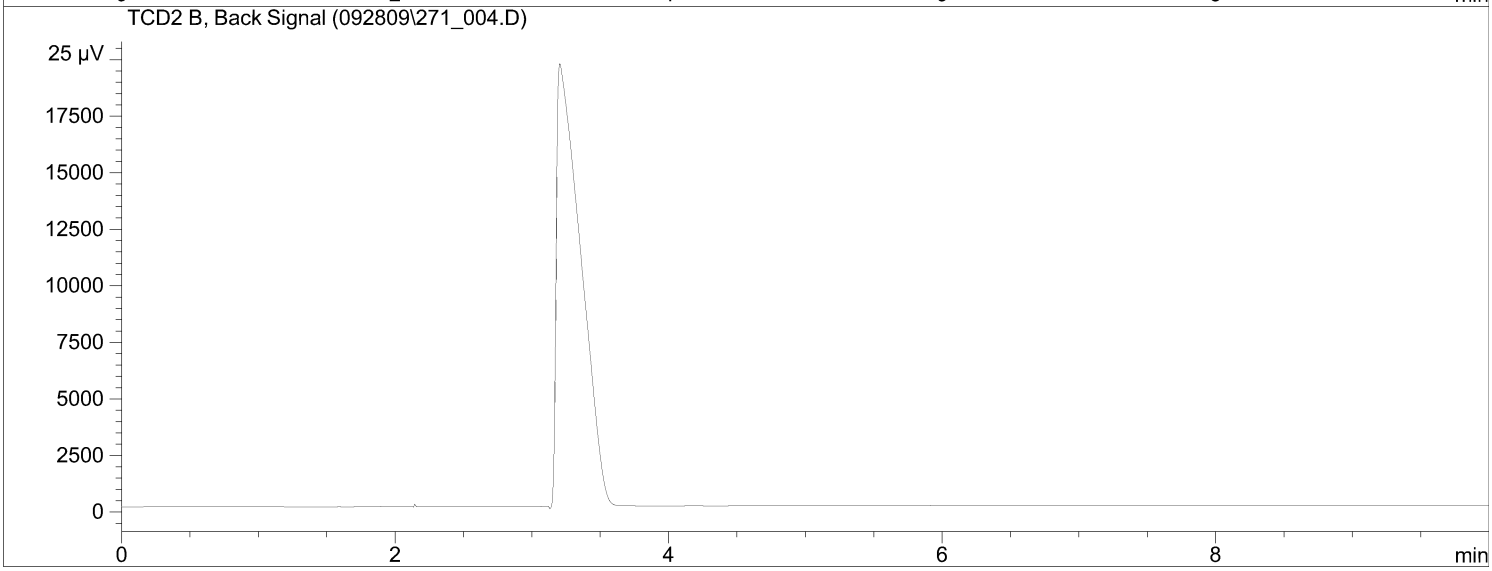
Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Data File C:\CHEM32\1\DATA\092809\271_004.D
Sample Name: ccv,s13027,1

==========
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 9/28/2009 10:26:48 AM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_090209.M
Last changed : 9/28/2009 10:26:46 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_092509.M
Last changed : 9/25/2009 02:19:23 PM by GC28 RGA





==========
External Standard Report
==========

Sorted By : Signal
Calib. Data Modified : 9/25/2009 02:19:19 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214999 GCAIR Air: ASTM D1946

Inst : GC28
Calnum : 1309353595002
Units : uL/L

Date : 02-SEP-2009 14:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	245_003	1309353595003		02-SEP-2009 14:11	S12872
L2	245_005	1309353595005		02-SEP-2009 14:55	S12875
L3	245_006	1309353595006		02-SEP-2009 15:21	S12876
L4	245_007	1309353595007		02-SEP-2009 15:41	S12877
L5	245_008	1309353595008		02-SEP-2009 16:01	S12878
L6	245_009	1309353595009		02-SEP-2009 16:33	S12879

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Methane	A	0.1205	0.1219	0.1218	0.1235	0.1259	0.1215	AVRG		8.16312		0.1225	2	.99	
Oxygen	B		0.2204	0.2192	0.3049	0.2006		AVRG		4.23288		0.2362	20	.99	
Carbon Dioxide	B		0.2630	0.2627	0.2696	0.2358		AVRG		3.87925		0.2578	6	.99	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Methane	A	10.00	-2	2000	-1	5000	-1	10000	1	2E+5	3	5E+5	-1
Oxygen	B			2000	-7	5000	-7	10000	**29**	2E+5	-15		
Carbon Dioxide	B			2000	2	5000	2	10000	5	2E+5	-9		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214999 GCAIR Air: EPA TO-3

Inst : GC28
Calnum : 1309386373003
Units : uL/L

Date : 25-SEP-2009 09:45
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	268_004	1309386373004		25-SEP-2009 09:45	S13012
L2	268_005	1309386373005		25-SEP-2009 10:23	S13013
L3	268_006	1309386373006		25-SEP-2009 10:43	S13018
L4	268_007	1309386373007		25-SEP-2009 11:03	S13019
L5	268_008	1309386373008		25-SEP-2009 11:38	S13020
L6	268_009	1309386373009		25-SEP-2009 12:03	S13021
L7	268_010	1309386373010		25-SEP-2009 12:25	S13022
L8	268_011	1309386373011		25-SEP-2009 12:44	S13023

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Methane-TO3	A	0.1399	0.1223	0.1365	0.1215	0.1330	0.1234	0.1257	0.1212	AVRG		7.81703		0.1279	6	.99	30	
C1-C2 as Ethane	A	0.2484	0.2263	0.2524	0.2227	0.2439				AVRG		4.18857		0.2387	6	.99	30	
C2-C3 as Propane	A	0.4084	0.3398	0.3792	0.3368	0.3690				AVRG		2.72739		0.3667	8	.99	30	
C3-C4 as n-Butane	A	0.5095	0.4544	0.5049	0.4476	0.4905				AVRG		2.07734		0.4814	6	.99	30	
C4-C5 as n-Pentane	A	0.5858	0.5651	0.6316	0.5604	0.6132				AVRG		1.69143		0.5912	5	.99	30	
C5-C6 as n-Hexane	A	0.7275	0.6826	0.7518	0.6683	0.7282				AVRG		1.40515		0.7117	5	.99	30	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Methane-TO3	A	0.500	9	10.00	-4	100.0	7	501.0	-5	1002	4	9980	-4	2E+5	-2	5E+5	-5
C1-C2 as Ethane	A	0.500	4	10.00	-5	100.0	6	505.5	-7	1011	2						
C2-C3 as Propane	A	0.500	11	10.00	-7	100.0	3	501.0	-8	1002	1						
C3-C4 as n-Butane	A	0.500	6	10.00	-6	100.0	5	502.5	-7	1005	2						
C4-C5 as n-Pentane	A	0.500	-1	10.00	-4	100.0	7	500.0	-5	1000	4						
C5-C6 as n-Hexane	A	0.500	2	10.00	-4	100.0	6	498.5	-6	997.0	2						

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214999 GCAIR Air
EPA TO-3

Inst : GC28
Calnum : 1309386373003 Cal Date : 25-SEP-2009

ICV 1309386373013 (268_013 25-SEP-2009) stds: S13025

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Methane-TO3	A	50000	49590	uL/L	-1	30	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214999 GCAIR Air
ASTM D1946

Inst : GC28 Run Name : QC513938 IDF : 1.0
Seqnum : 1309390746003.8 File : 271_003 Time : 28-SEP-2009 09:41
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Carbon Dioxide	B	0.2578	0.2578	10000	10010	uL/L	0	30	u **y**
Oxygen	B	0.2362	0.2309	10000	9772	uL/L	-2	30	u **y**
Methane	A	0.1225	0.1219	10000	9953	uL/L	0	30	u **y**

APP 09/28/09 : Sample Name entered incorrectly into sequence raw data. [general version]

u=use y=RL raised

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214999 GCAIR Air
EPA TO-3

Inst : GC28 Run Name : QC513934 IDF : 1.0
Seqnum : 1309390746004.8 File : 271_004 Time : 28-SEP-2009 10:26
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1300	100.0	101.9	uL/L	2	30	u
C1-C2 as Ethane	A	0.2387	0.2405	100.0	100.7	uL/L	1	30	u
C2-C3 as Propane	A	0.3667	0.3610	100.0	98.45	uL/L	-2	30	u
C3-C4 as n-Butane	A	0.4814	0.4819	100.0	100.1	uL/L	0	30	u
C4-C5 as n-Pentane	A	0.5912	0.6031	100.0	102.0	uL/L	2	30	u
C5-C6 as n-Hexane	A	0.7117	0.7176	100.0	100.8	uL/L	1	30	u

APP 09/28/09 : Sample Name entered incorrectly into sequence raw data. [general version]

u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214999 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309390746014.3 File : 271_014 Time : 28-SEP-2009 15:21
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane	A	0.1225	0.1225	10000	10000	uL/L	0	30	
Oxygen	B	0.2362	0.2222	10000	9407	uL/L	-6	30	
Carbon Dioxide	B	0.2578	0.2624	10000	10180	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214999 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309390746015.3 File : 271_015 Time : 28-SEP-2009 15:40
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1394	100.0	109.2	uL/L	9	30	
C1-C2 as Ethane	A	0.2387	0.2430	100.0	101.8	uL/L	2	30	
C2-C3 as Propane	A	0.3667	0.3642	100.0	99.34	uL/L	-1	30	
C3-C4 as n-Butane	A	0.4814	0.4854	100.0	100.8	uL/L	1	30	
C4-C5 as n-Pentane	A	0.5912	0.6069	100.0	102.7	uL/L	3	30	
C5-C6 as n-Hexane	A	0.7117	0.7224	100.0	101.5	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214999 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309392160002.4 File : 272_002 Time : 29-SEP-2009 08:18
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane	A	0.1225	0.1218	10000	9949	uL/L	-1	30	
Oxygen	B	0.2362	0.2273	10000	9623	uL/L	-4	30	
Carbon Dioxide	B	0.2578	0.2586	10000	10040	uL/L	0	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214999 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309392160003.3 File : 272_003 Time : 29-SEP-2009 08:40
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1329	100.0	104.1	uL/L	4	30	
C1-C2 as Ethane	A	0.2387	0.2366	100.0	99.09	uL/L	-1	30	
C2-C3 as Propane	A	0.3667	0.3550	100.0	96.82	uL/L	-3	30	
C3-C4 as n-Butane	A	0.4814	0.4731	100.0	98.28	uL/L	-2	30	
C4-C5 as n-Pentane	A	0.5912	0.5921	100.0	100.2	uL/L	0	30	
C5-C6 as n-Hexane	A	0.7117	0.7041	100.0	98.93	uL/L	-1	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214999 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
Seqnum : 1309392160016.3 File : 272_016 Time : 29-SEP-2009 13:32
Cal : 1309353595002 Caldate : 02-SEP-2009
Standards: S13026

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane	A	0.1225	0.1224	10000	9996	uL/L	0	30	
Oxygen	B	0.2362	0.2188	10000	9260	uL/L	-7	30	
Carbon Dioxide	B	0.2578	0.2639	10000	10240	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214999 GCAIR Air
EPA TO-3

Inst : GC28 IDF : 1.0
Seqnum : 1309392160017.3 File : 272_017 Time : 29-SEP-2009 13:53
Cal : 1309386373003 Caldate : 25-SEP-2009
Standards: S13027

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1279	0.1293	100.0	101.3	uL/L	1	30	
C1-C2 as Ethane	A	0.2387	0.2396	100.0	100.4	uL/L	0	30	
C2-C3 as Propane	A	0.3667	0.3594	100.0	98.01	uL/L	-2	30	
C3-C4 as n-Butane	A	0.4814	0.4788	100.0	99.47	uL/L	-1	30	
C4-C5 as n-Pentane	A	0.5912	0.5997	100.0	101.4	uL/L	1	30	
C5-C6 as n-Hexane	A	0.7117	0.7130	100.0	100.2	uL/L	0	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309353595

Instrument : GC28 Begun : 09/02/09 13:15
Method : ASTM D1946

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	245_001	IB	IB			09/02/09 13:15	1.0		
002	245_002	IB	IB			09/02/09 13:49	1.0		
003	245_003	ICAL				09/02/09 14:11	1.0	1	
004	245_004	X				09/02/09 14:31	1.0	2	
005	245_005	ICAL				09/02/09 14:55	1.0	3	
006	245_006	ICAL				09/02/09 15:21	1.0	4	
007	245_007	ICAL				09/02/09 15:41	1.0	5	
008	245_008	ICAL				09/02/09 16:01	1.0	6	
009	245_009	ICAL				09/02/09 16:33	1.0	7	

APP 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 009.

APP 10/05/09 : Run 004 was used to test response at low level. Due to poor response this point will never be used.

Analyst: APP Date: 09/25/09 Reviewer: SJD Date: 10/06/09

Standards used: 1=S12872 2=S12874 3=S12875 4=S12876 5=S12877 6=S12878 7=S12879

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309386373

Instrument : GC28 Begun : 09/25/09 07:33
Method : ASTM D1946, EPA TO-3

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	268_001	IB	IB			09/25/09 07:33	1.0		
002	268_002	CCV				09/25/09 07:50	1.0	1	11:C1-C2=1100
003	268_003	IB	IB			09/25/09 08:19	1.0		
004	268_004	ICAL				09/25/09 09:45	1.0	2	
005	268_005	ICAL				09/25/09 10:23	1.0	3	
006	268_006	ICAL				09/25/09 10:43	1.0	4	
007	268_007	ICAL				09/25/09 11:03	1.0	5	
008	268_008	ICAL				09/25/09 11:38	1.0	6	
009	268_009	ICAL				09/25/09 12:03	1.0	7	
010	268_010	ICAL				09/25/09 12:25	1.0	8	
011	268_011	ICAL				09/25/09 12:44	1.0	9	
012	268_012	IB	IB			09/25/09 13:26	1.0		
013	268_013	ICV				09/25/09 13:45	1.0	10	10:C1-C2=40000

APP 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 013.

Analyst: APP Date: 09/25/09 Reviewer: SJD Date: 10/07/09

Standards used: 1=S12959 2=S13012 3=S13013 4=S13018 5=S13019 6=S13020 7=S13021 8=S13022 9=S13023 10=S13025

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309390746

Instrument : GC28 Begun : 09/28/09 08:26
Method : ASTM D1946, EPA TO-3

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	271_001	IB	IB			09/28/09 08:26	1.0		
002	271_002	IB	IB			09/28/09 09:22	1.0		
003	271_003	CCV/LCS	QC513938	Air	155375	09/28/09 09:41	1.0	1	
004	271_004	CCV/BS	QC513934	Air	155375	09/28/09 10:26	1.0	2	
005	271_005	BSD	QC513935	Air	155375	09/28/09 11:00	1.0	2	
006	271_006	BLANK	QC513933	Air	155375	09/28/09 11:25	1.0		
007	271_007	BLANK	QC513937	Air	155375	09/28/09 12:27	1.0		
008	271_008	MSS	214904-001	Air	155375	09/28/09 13:00	3.11		
009	271_009	SDUP	QC513936	Air	155375	09/28/09 13:20	3.11		
010	271_010	MSS	214904-003	Air	155375	09/28/09 13:44	2.07		
011	271_011	SDUP	QC513939	Air	155375	09/28/09 14:03	2.07		
012	271_012	SAMPLE	214904-002	Air	155375	09/28/09 14:31	1.97		
013	271_013	IB	IB			09/28/09 14:54	1.0		
014	271_014	CCV				09/28/09 15:21	1.0	1	
015	271_015	CCV				09/28/09 15:40	1.0	2	
016	271_016	SAMPLE	214904-004	Air	155375	09/28/09 16:08	2.21		
017	271_017	SAMPLE	214904-005	Air	155375	09/28/09 16:25	2.300		
018	271_018	SAMPLE	214904-006	Air	155375	09/28/09 16:46	2.19		
019	271_019	SAMPLE	214904-007	Air	155375	09/28/09 17:08	2.09		
020	271_020	SAMPLE	214904-008	Air	155375	09/28/09 17:27	2.08		
021	271_021	SAMPLE	214904-009	Air	155375	09/28/09 17:47	2.22		
022	271_022	SAMPLE	214904-010	Air	155375	09/28/09 18:08	2.18		
023	271_023	IB	IB			09/28/09 18:26	1.0		
024	271_024	CCV				09/28/09 18:48	1.0	1	
025	271_025	CCV				09/28/09 19:08	1.0	2	

APP 09/29/09 : Matrix spikes were not performed for this analysis in batch 155375 because they are not required by the method.

APP 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 025.

Analyst: APP Date: 09/29/09 Reviewer: SJD Date: 10/07/09

Standards used: 1=S13026 2=S13027

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309392160

Instrument : GC28 Begun : 09/29/09 08:00
Method : ASTM D1946, EPA TO-3

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	272_001	IB	IB			09/29/09 08:00	1.0		
002	272_002	CCV				09/29/09 08:18	1.0	1	
003	272_003	CCV				09/29/09 08:40	1.0	2	
004	272_004	SAMPLE	214904-010	Air	155375	09/29/09 09:02	2.18		
005	272_005	SAMPLE	214904-002	Air	155375	09/29/09 09:20	1.97		
006	272_006	SAMPLE	214904-009	Air	155375	09/29/09 09:41	2.22		
007	272_007	SAMPLE	214904-011	Air	155375	09/29/09 10:01	2.17		
008	272_008	SAMPLE	214904-012	Air	155375	09/29/09 10:27	2.16		
009	272_009	IB	IB			09/29/09 10:59	1.0		
010	272_010	SAMPLE	214904-013	Air	155375	09/29/09 11:20	2.100		
011	272_011	SAMPLE	214904-014	Air	155375	09/29/09 11:39	2.11		
012	272_012	SAMPLE	214999-005	Air	155375	09/29/09 12:03	2.06		
013	272_013	SAMPLE	214999-006	Air	155375	09/29/09 12:24	2.07		
014	272_014	SAMPLE	214999-007	Air	155375	09/29/09 12:51	2.11		
015	272_015	IB	IB			09/29/09 13:12	1.0		
016	272_016	CCV				09/29/09 13:32	1.0	1	
017	272_017	CCV				09/29/09 13:53	1.0	2	

APP 09/29/09 : Matrix spikes were not performed for this analysis in batch 155375 because they are not required by the method.

APP 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 017.

Analyst: APP Date: 09/29/09 Reviewer: SJD Date: 10/07/09

Standards used: 1=S13026 2=S13027

Page 1 of 1

PROJECT _____

Continued From Page _____

~~Date~~	Sample ID	CAN ID	Initial pressure (psig)	Final pressure (psig)	Dilution Fac	Comments
9/23/04 AM	214897-005	C00014	1.5 added	30.00	42.6x	20x of 2.13 x C00110
↓	↓ 006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
500 9/26/05	214998-001	C00049	10.30	23.31	2.26x	
	↓ -002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00055	10.81	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	↓ -007	C00147	11.16	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.18	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	↓ -014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1203	—	—	1x	

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 215048
ANALYTICAL REPORT

CH2M Hill	Project : HONEYWELL AIR
2625 South Plaza Drive	Location : BSVE QTR SVM
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
ASE-54A-9Q3	215048-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/14/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215048**
Client:	**CH2M Hill**
Project:	**HONEYWELL AIR**
Location:	**BSVE QTR SVM**
Request Date:	**09/18/09**
Samples Received:	**09/18/09**

This data package contains sample and QC results for one air sample, requested for the above referenced project on 09/18/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):
ASE-54A-9Q3 (lab # 215048-001) was diluted due to problematic matrix.

No other analytical problems were encountered.

Chain of Custody

715048

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	39967.60259
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

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Privileged & Confidential

Site Name: Sky Harbor AZ
Phase:
Location of Site: Phoenix, AZ
Sampling Program: BSVE QTR SVM

Sampling Co.: CH2MHILL
EDD To: Jennifer Peterson, jennifer.peterson@ch2m.com
Sampler: Vladimir Carino
PO #: 4990342
Analysis Turnaround Time (TAT): 10
Consultant: CH2M HILL
Full Report TAT: 10

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy to J. Peterson

	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	TO-15 (VOCs)	TO-3M (Methane and TPH C6-C10)	TO-3M (Methane)	ASTM 1946 (O2 and CO2)	Sampling Method (code)	Canister Serial No.
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units							
1	ASE-54A	55.5	66.82	ASE-54A-9Q3	9/15/09	8:25	AIR	AIR	REG	1	G	N	X					00140
2	Low Vac. : Do Not Analyze																	00169
3	Low Vac. : Do Not Analyze																	00054
4	Do Not Analyze																	00181
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Vlad Ca	CH2M HILL	Bernie Fok	CH2M HILL		
Date/Time	9/15/09 16:15	Date/Time	9/15/09 16:15	Cooler Temp.	
Relinquished by: Bernie Fok	Company: ~~Fed Ex~~ CH2M HILL	Received by: Fed Ex	Company	Condition	Custody Seals Intact
Date/Time: 9/17/09 0900			Date/Time	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

Rec'd 9-18-9 1000

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 215048 Date Received 9-18-9 Number of coolers 1 BX
Client CH2MHILL Project Honeywell ISSUE ATRSM

Date Opened 9-18-9 By (print) SEMAJS (sign) [signature]
Date Logged in 9-21-9 By (print) [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
   Shipping info 7921 6193 0171

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are samples in the appropriate containers for indicated tests? _____ YES NO
11. Are sample labels present, in good condition and complete? _____ YES NO
12. Do the sample labels agree with custody papers? _____ YES NO
13. Was sufficient amount of sample sent for tests requested? _____ YES NO
14. Are the samples appropriately preserved? _____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Laboratory Job Number 215048

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	215048	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Field ID:	ASE-54A-9Q3	Diln Fac:	132.6
Lab ID:	215048-001	Batch#:	155785
Matrix:	Air	Sampled:	09/15/09
Units (V):	ppbv	Received:	09/18/09
Units (M):	ug/m3	Analyzed:	10/08/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	66	ND	330	D1
Vinyl Chloride	2,200	66	5,700	170	D1
Chloroethane	150	66	380	170	D1
Trichlorofluoromethane	ND	66	ND	370	D1
1,1-Dichloroethene	ND	66	ND	260	D1
Methylene Chloride	ND	66	ND	230	D1
Freon 113	240	66	1,900	510	D1
trans-1,2-Dichloroethene	ND	66	ND	260	D1
1,1-Dichloroethane	1,300	66	5,100	270	D1
MTBE	76	66	270	240	D1
cis-1,2-Dichloroethene	780	66	3,100	260	D1
n-Hexane	1,000	66	3,600	230	D1
Chloroform	ND	66	ND	320	D1
1,2-Dichloroethane	ND	66	ND	270	D1
1,1,1-Trichloroethane	ND	66	ND	360	D1
Benzene	ND	66	ND	210	D1
Carbon Tetrachloride	ND	66	ND	420	D1
1,4-Dioxane	ND	66	ND	240	D1
Trichloroethene	570	66	3,000	360	D1
Toluene	94	66	350	250	D1
Tetrachloroethene	ND	66	ND	450	D1
Ethylbenzene	340	66	1,500	290	D1
m,p-Xylenes	660	66	2,900	290	D1
o-Xylene	ND	66	ND	290	D1
1,3,5-Trimethylbenzene	240	66	1,200	330	D1
1,2,4-Trimethylbenzene	960	66	4,700	330	D1
1,4-Dichlorobenzene	ND	66	ND	400	D1
Xylene (total)	660	130	2,900	580	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	93	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	215048	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155785
Units (V):	ppbv	Analyzed:	10/07/09
Diln Fac:	1.000		

Type: BS Lab ID: QC515614

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ Flags
Freon 12	10.00	9.406	94	70-130	
Vinyl Chloride	10.00	9.174	92	70-130	
Chloroethane	10.00	10.85	108	70-130	
Trichlorofluoromethane	10.00	9.405	94	70-130	
1,1-Dichloroethene	10.00	10.46	105	70-130	
Methylene Chloride	10.00	7.098	71	70-130	
Freon 113	10.00	9.490	95	70-130	
trans-1,2-Dichloroethene	10.00	9.558	96	70-130	
1,1-Dichloroethane	10.00	9.426	94	70-130	
MTBE	10.00	10.24	102	70-130	
cis-1,2-Dichloroethene	10.00	9.775	98	70-130	
n-Hexane	10.00	10.06	101	70-130	
Chloroform	10.00	9.999	100	70-130	
1,2-Dichloroethane	10.00	9.517	95	70-130	
1,1,1-Trichloroethane	10.00	9.786	98	70-130	
Benzene	10.00	9.940	99	70-130	
Carbon Tetrachloride	10.00	9.657	97	70-130	
1,4-Dioxane	10.00	9.994	100	70-130	
Trichloroethene	10.00	8.645	86	70-130	
Toluene	10.00	9.640	96	70-130	
Tetrachloroethene	10.00	8.996	90	70-130	
Ethylbenzene	10.00	10.01	100	70-130	
m,p-Xylenes	20.00	19.93	100	70-130	
o-Xylene	10.00	9.809	98	70-130	
1,3,5-Trimethylbenzene	10.00	9.592	96	70-130	
1,2,4-Trimethylbenzene	10.00	10.21	102	70-130	
1,4-Dichlorobenzene	10.00	9.209	92	70-130	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	215048	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	155785
Units (V):	ppbv	Analyzed:	10/07/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC515615

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	10.00	9.534	95	70-130	1	25	
Vinyl Chloride	10.00	9.833	98	70-130	7	25	
Chloroethane	10.00	10.50	105	70-130	3	25	
Trichlorofluoromethane	10.00	9.422	94	70-130	0	25	
1,1-Dichloroethene	10.00	10.55	105	70-130	1	25	
Methylene Chloride	10.00	7.089	71	70-130	0	25	
Freon 113	10.00	9.478	95	70-130	0	25	
trans-1,2-Dichloroethene	10.00	9.852	99	70-130	3	25	
1,1-Dichloroethane	10.00	9.697	97	70-130	3	25	
MTBE	10.00	10.30	103	70-130	1	25	
cis-1,2-Dichloroethene	10.00	10.03	100	70-130	3	25	
n-Hexane	10.00	10.07	101	70-130	0	25	
Chloroform	10.00	10.24	102	70-130	2	25	
1,2-Dichloroethane	10.00	9.382	94	70-130	1	25	
1,1,1-Trichloroethane	10.00	9.566	96	70-130	2	25	
Benzene	10.00	9.782	98	70-130	2	25	
Carbon Tetrachloride	10.00	9.390	94	70-130	3	25	
1,4-Dioxane	10.00	9.471	95	70-130	5	25	
Trichloroethene	10.00	8.457	85	70-130	2	25	
Toluene	10.00	9.661	97	70-130	0	25	
Tetrachloroethene	10.00	9.381	94	70-130	4	25	
Ethylbenzene	10.00	10.04	100	70-130	0	25	
m,p-Xylenes	20.00	20.21	101	70-130	1	25	
o-Xylene	10.00	9.971	100	70-130	2	25	
1,3,5-Trimethylbenzene	10.00	9.619	96	70-130	0	25	
1,2,4-Trimethylbenzene	10.00	10.05	100	70-130	2	25	
1,4-Dichlorobenzene	10.00	9.257	93	70-130	1	25	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	215048	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	HONEYWELL AIR	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC515616	Diln Fac:	1.000
Matrix:	Air	Batch#:	155785
Units (V):	ppbv	Analyzed:	10/07/09

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Freon 12	ND	0.50	ND	2.5	
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
Trichlorofluoromethane	ND	0.50	ND	2.8	
1,1-Dichloroethene	ND	0.50	ND	2.0	
Methylene Chloride	ND	0.50	ND	1.7	
Freon 113	ND	0.50	ND	3.8	
trans-1,2-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
1,2-Dichloroethane	ND	0.50	ND	2.0	
1,1,1-Trichloroethane	ND	0.50	ND	2.7	
Benzene	ND	0.50	ND	1.6	
Carbon Tetrachloride	ND	0.50	ND	3.1	
1,4-Dioxane	ND	0.50	ND	1.8	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
1,4-Dichlorobenzene	ND	0.50	ND	3.0	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 215048 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209402039015 File : 278_015 Time : 05-OCT-2009 23:31

Standards: S13044 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	71543	11.09	
75	30% - 66% of mass 95	239418	37.11	
95		645234	100.00	
96	5% - 9% of mass 95	38635	5.99	
173	< 2% of mass 174	610	0.17	
174	50% - 120% of mass 95	353664	54.81	
175	4% - 9% of mass 174	26866	7.60	
176	93% - 101% of mass 174	341791	96.64	
177	5% - 9% of mass 176	23681	6.93	

CURTIS & TOMPKINS BFB TUNE FOR 215048 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1209404057001 File : 280_001 Time : 07-OCT-2009 14:17

Standards: S13044

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	57702	10.14	
75	30% - 66% of mass 95	218675	38.43	
95		569035	100.00	
96	5% - 9% of mass 95	34220	6.01	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	320486	56.32	
175	4% - 9% of mass 174	20433	6.38	
176	93% - 101% of mass 174	300143	93.65	
177	5% - 9% of mass 176	17007	5.67	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215048 MSAIR Air: EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001
Units : nL/L

Date : 06-OCT-2009 03:40
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	278_019	1209402039019	NONE	06-OCT-2009 03:40	S13093 (2X), S13044 (15X)
L2	278_020	1209402039020	NONE	06-OCT-2009 04:39	S13092 (6X), S13044 (15X)
L3	278_021	1209402039021	NONE	06-OCT-2009 05:40	S13092 (2X), S13044 (15X)
L4	278_022	1209402039022	NONE	06-OCT-2009 06:39	S13092, S13044 (15X)
L5	278_023	1209402039023	NONE	06-OCT-2009 07:39	S13091 (6X), S13044 (15X)
L6	278_024	1209402039024	NONE	06-OCT-2009 08:39	S13091 (3X), S13044 (15X)
L7	278_025	1209402039025	NONE	06-OCT-2009 09:38	S13091 (2X), S13044 (15X)
L8	278_026	1209402039026	NONE	06-OCT-2009 10:38	S13091, S13044 (15X)
L9	278_030	1209402039030	NONE	06-OCT-2009 14:38	S13093 (6X), S13044 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Freon 12	2.8405	3.3043	2.8800	2.6790	3.2536	2.7319	2.6142	2.3262	3.3901	AVRG		0.34589		2.8911	12	0.99	30	
Vinyl Chloride	0.4208m	0.5795m	0.5394m	0.5316	0.6977	0.6186	0.6731	0.5454	0.3688m	AVRG		1.80906		0.5528	19	0.99	30	
Chloroethane	0.0535m	0.0761	0.0732	0.0727	0.0929	0.0737	0.0659	0.0459	0.0586m	AVRG		14.6930		0.0681	20	0.99	30	
Trichlorofluoromethane	3.5742	4.1688	3.6361	3.3806	4.0861	3.4093	3.1916	2.8640	4.5297	AVRG		0.27405		3.6489	14	0.99	30	
1,1-Dichloroethene	0.9224	1.2213	1.0764	1.0199	1.3098	1.0559	0.9810	0.7957	1.0367	AVRG		0.95551		1.0466	15	0.99	30	
Methylene Chloride	0.6289m	1.2623m	0.7372m	0.7054	1.4280	0.9114	0.9503		1.1201	AVRG		1.03311		0.9679	29	0.99	30	
Freon 113	2.6647	3.0476	2.6608	2.4612	2.8819	2.4253	2.2488	1.9144	3.2988	AVRG		0.38130		2.6226	16	0.99	30	
trans-1,2-Dichloroethene	1.7451	2.1915	1.9357	1.7717	2.2645	1.8472	1.7026	1.3654	2.1393	AVRG		0.53057		1.8848	15	0.99	30	
1,1-Dichloroethane	2.0868	2.4714	2.1346	2.0356m	2.5074	2.1759	2.1059	1.9411	2.4710	AVRG		0.45159		2.2144	10	0.99	30	
MTBE	1.0124m	1.2977	1.1781	1.1085	1.3443	1.1082	1.0351	0.8656	1.1082m	AVRG		0.89480		1.1176	13	0.99	30	
cis-1,2-Dichloroethene	1.7870	2.2028	1.8824	1.7244	2.2864	1.8581	1.7266	1.3931	2.1233	AVRG		0.52991		1.8871	15	0.99	30	
n-Hexane	0.7627	0.9403	0.8097	0.7731	0.9653	0.7782	0.7471	0.6427	0.9276	AVRG		1.22505		0.8163	13	0.99	30	
Chloroform	2.4294	2.7477	2.3978	2.1577	2.5645	2.0228	1.9130	1.5088	2.9417	AVRG		0.43513		2.2982	19	0.99	30	
1,2-Dichloroethane	0.5984	0.7249	0.6240	0.5795	0.7308	0.6501	0.5984	0.5484	0.7337	AVRG		1.55489		0.6431	11	0.99	30	
1,1,1-Trichloroethane	0.8381	0.9510	0.8170	0.7503	0.8935m	0.8025	0.7611	0.7118	0.9990	AVRG		1.19613		0.8360	11	0.99	30	
Benzene	0.4250	0.5015	0.4268	0.3964	0.4716	0.4139	0.3838	0.3454	0.5220	AVRG		2.31577		0.4318	13	0.99	30	
Carbon Tetrachloride	0.9828	1.1201	0.9721	0.9071	1.1126	0.9860	0.9275	0.8970	1.1935	AVRG		0.98915		1.0110	10	0.99	30	
1,4-Dioxane	0.0957	0.1300	0.1199	0.1300m	0.1925				0.1063m	AVRG		7.74826		0.1291	26	0.99	30	
Trichloroethene	0.4738	0.8220	0.6773	0.5859	0.5161	0.4278	0.3784m			AVRG		1.80353		0.5545	28	0.99	30	
Toluene	1.3988	1.7195	1.4640	1.4269	1.7009	1.4817	1.3702	1.2342	1.6037	AVRG		0.67164		1.4889	11	0.99	30	
Tetrachloroethene	0.5457	0.6275	0.5159	0.4729	0.5450	0.4758	0.4154	0.3541	0.6342	AVRG		1.96228		0.5096	18	0.99	30	
Ethylbenzene	1.7573	2.2065	1.8689	1.7757	2.1207	1.7156	1.5669	1.3132	1.9844	AVRG		0.55184		1.8121	15	0.99	30	
m,p-Xylenes	1.7649	2.1417m	1.7770m	1.6502m	1.9262	1.5282	1.3253m	1.1120	1.9850	AVRG		0.59170		1.6901	19	0.99	30	
o-Xylene	1.7386	1.9975	1.6749	1.5506	1.7626	1.3408	1.1776	1.0433	1.9223	AVRG		0.63344		1.5787	21	0.99	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,3,5-Trimethylbenzene	2.1410	2.6275	2.1521	2.0061	2.4538	1.9641	1.8206	1.5516	2.3024	AVRG		0.47320		2.1133	15	0.99	30	
1,2,4-Trimethylbenzene	1.8528	2.4939	2.1088	1.9492	2.3110	1.8994	1.6872	1.4222	1.7971	AVRG		0.51365		1.9469	17	0.99	30	
1,4-Dichlorobenzene	1.2918	1.5261	1.2552	1.2199	1.5010	1.3011	1.2117	1.1014	1.4237	AVRG		0.76067		1.3146	11	0.99	30	
Bromofluorobenzene	0.7460	0.7780	0.7557	0.7722	0.7890	0.7898	0.7709	0.7833	0.7743	AVRG		1.29326		0.7732	2	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	13	33.33	-6	50.00	-10	100.0	-20	0.167	17
Vinyl Chloride	0.500	**-24**	1.667	5	5.000	-2	10.00	-4	16.67	**26**	33.33	12	50.00	**22**	100.0	-1	0.167	**-33**
Chloroethane	0.500	**-21**	1.667	12	5.000	8	10.00	7	16.67	**36**	33.33	8	50.00	-3	100.0	**-33**	0.167	-14
Trichlorofluoromethane	0.500	-2	1.667	14	5.000	0	10.00	-7	16.67	12	33.33	-7	50.00	-13	100.0	**-22**	0.167	**24**
1,1-Dichloroethene	0.500	-12	1.667	17	5.000	3	10.00	-3	16.67	**25**	33.33	1	50.00	-6	100.0	**-24**	0.167	-1
Methylene Chloride	0.500	**-35**	1.667	**30**	5.000	**-24**	10.00	**-27**	16.67	**48**	33.33	-6	50.00	-2			0.167	16
Freon 113	0.500	2	1.667	16	5.000	1	10.00	-6	16.67	10	33.33	-8	50.00	-14	100.0	**-27**	0.167	**26**
trans-1,2-Dichloroethene	0.500	-7	1.667	16	5.000	3	10.00	-6	16.67	20	33.33	-2	50.00	-10	100.0	**-28**	0.167	14
1,1-Dichloroethane	0.500	-6	1.667	12	5.000	-4	10.00	-8	16.67	13	33.33	-2	50.00	-5	100.0	-12	0.167	12
MTBE	0.500	-9	1.667	16	5.000	5	10.00	-1	16.67	20	33.33	-1	50.00	-7	100.0	**-23**	0.167	-1
cis-1,2-Dichloroethene	0.500	-5	1.667	17	5.000	0	10.00	-9	16.67	**21**	33.33	-2	50.00	-9	100.0	**-26**	0.167	13
n-Hexane	0.500	-7	1.667	15	5.000	-1	10.00	-5	16.67	18	33.33	-5	50.00	-8	100.0	**-21**	0.167	14
Chloroform	0.500	6	1.667	20	5.000	4	10.00	-6	16.67	12	33.33	-12	50.00	-17	100.0	**-34**	0.167	**28**
1,2-Dichloroethane	0.500	-7	1.667	13	5.000	-3	10.00	-10	16.67	14	33.33	1	50.00	-7	100.0	-15	0.167	14
1,1,1-Trichloroethane	0.500	0	1.667	14	5.000	-2	10.00	-10	16.67	7	33.33	-4	50.00	-9	100.0	-15	0.167	19
Benzene	0.500	-2	1.667	16	5.000	-1	10.00	-8	16.67	9	33.33	-4	50.00	-11	100.0	-20	0.167	**21**
Carbon Tetrachloride	0.500	-3	1.667	11	5.000	-4	10.00	-10	16.67	10	33.33	-2	50.00	-8	100.0	-11	0.167	18
1,4-Dioxane	0.500	**-26**	1.667	1	5.000	-7	10.00	1	16.67	**49**							0.167	-18
Trichloroethene	0.500	-15	1.667	**48**	5.000	**22**	10.00	6	16.67	-7	33.33	**-23**	50.00	**-32**				
Toluene	0.500	-6	1.667	15	5.000	-2	10.00	-4	16.67	14	33.33	0	50.00	-8	100.0	-17	0.167	8
Tetrachloroethene	0.500	7	1.667	**23**	5.000	1	10.00	-7	16.67	7	33.33	-7	50.00	-18	100.0	**-31**	0.167	**24**
Ethylbenzene	0.500	-3	1.667	**22**	5.000	3	10.00	-2	16.67	17	33.33	-5	50.00	-14	100.0	**-28**	0.167	10
m,p-Xylenes	1.000	4	3.333	**27**	10.00	5	20.00	-2	33.33	14	66.67	-10	100.0	**-22**	200.0	**-34**	0.333	17
o-Xylene	0.500	10	1.667	**27**	5.000	6	10.00	-2	16.67	12	33.33	-15	50.00	**-25**	100.0	**-34**	0.167	**22**
1,3,5-Trimethylbenzene	0.500	1	1.667	**24**	5.000	2	10.00	-5	16.67	16	33.33	-7	50.00	-14	100.0	**-27**	0.167	9
1,2,4-Trimethylbenzene	0.500	-5	1.667	**28**	5.000	8	10.00	0	16.67	19	33.33	-2	50.00	-13	100.0	**-27**	0.167	-8
1,4-Dichlorobenzene	0.500	-2	1.667	16	5.000	-5	10.00	-7	16.67	14	33.33	-1	50.00	-8	100.0	-16	0.167	8
Bromofluorobenzene	10.00	-4	10.00	1	10.00	-2	10.00	0	10.00	2	10.00	2	10.00	0	10.00	1	10.00	0

SJD 10/06/09 : All manual integrations made due to manually choosing peaks, redrawing baselines, or chopping peaks due to co-elution.

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215048 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1209402039001 Cal Date : 06-OCT-2009

ICV 1209402039031 (278_031 06-OCT-2009) stds: S13086, S13044 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	10.00	9.813	nL/L	-2	30	
Vinyl Chloride	10.00	10.60	nL/L	6	30	m
Chloroethane	10.00	10.99	nL/L	10	30	
Trichlorofluoromethane	10.00	9.671	nL/L	-3	30	
1,1-Dichloroethene	10.00	10.58	nL/L	6	30	
Methylene Chloride	10.00	7.287	nL/L	**-27**	30	!v-
Freon 113	10.00	10.31	nL/L	3	30	
trans-1,2-Dichloroethene	10.00	9.859	nL/L	-1	30	
1,1-Dichloroethane	10.00	9.627	nL/L	-4	30	
MTBE	10.00	10.22	nL/L	2	30	
cis-1,2-Dichloroethene	10.00	9.793	nL/L	-2	30	
n-Hexane	10.00	9.975	nL/L	0	30	
Chloroform	10.00	10.20	nL/L	2	30	
1,2-Dichloroethane	10.00	9.524	nL/L	-5	30	
1,1,1-Trichloroethane	10.00	9.886	nL/L	-1	30	
Benzene	10.00	9.859	nL/L	-1	30	
Carbon Tetrachloride	10.00	9.546	nL/L	-5	30	
1,4-Dioxane	10.00	9.502	nL/L	-5	30	
Trichloroethene	10.00	8.640	nL/L	-14	30	
Toluene	10.00	9.721	nL/L	-3	30	
Tetrachloroethene	10.00	9.095	nL/L	-9	30	
Ethylbenzene	10.00	10.05	nL/L	0	30	
m,p-Xylenes	20.00	19.74	nL/L	-1	30	m
o-Xylene	10.00	9.758	nL/L	-2	30	
1,3,5-Trimethylbenzene	10.00	9.827	nL/L	-2	30	
1,2,4-Trimethylbenzene	10.00	10.02	nL/L	0	30	
1,4-Dichlorobenzene	10.00	9.097	nL/L	-9	30	

!=warning -=low bias m=manual integration v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215048 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC515614 IDF : 1.0
Seqnum : 1209404057002.2 File : 280_002 Time : 07-OCT-2009 15:21
Cal : 1209402039001 Caldate : 06-OCT-2009
Standards: S13086, S13044 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	2.8911	2.7186	10.00	9.406	nL/L	-6	30	u
Vinyl Chloride	0.5528	0.5070	10.00	9.174	nL/L	-8	30	u
Chloroethane	0.0681	0.0738	10.00	10.85	nL/L	8	30	u
Trichlorofluoromethane	3.6489	3.4310	10.00	9.405	nL/L	-6	30	u
1,1-Dichloroethene	1.0466	1.0946	10.00	10.46	nL/L	5	30	u
Methylene Chloride	0.9679	0.6869	10.00	7.098	nL/L	-29	30	!v- u
Freon 113	2.6226	2.4877	10.00	9.490	nL/L	-5	30	u
trans-1,2-Dichloroethene	1.8848	1.8004	10.00	9.558	nL/L	-4	30	u
1,1-Dichloroethane	2.2144	2.0869	10.00	9.426	nL/L	-6	30	u
MTBE	1.1176	1.1437	10.00	10.24	nL/L	2	30	u
cis-1,2-Dichloroethene	1.8871	1.8440	10.00	9.775	nL/L	-2	30	u
n-Hexane	0.8163	0.8206	10.00	10.06	nL/L	1	30	u
Chloroform	2.2982	2.2971	10.00	9.999	nL/L	0	30	u
1,2-Dichloroethane	0.6431	0.6120	10.00	9.517	nL/L	-5	30	u
1,1,1-Trichloroethane	0.8360	0.8178	10.00	9.786	nL/L	-2	30	u
Benzene	0.4318	0.4292	10.00	9.940	nL/L	-1	30	u
Carbon Tetrachloride	1.0110	0.9758	10.00	9.657	nL/L	-3	30	u
1,4-Dioxane	0.1291	0.1289	10.00	9.994	nL/L	0	30	m u
Trichloroethene	0.5545	0.4794	10.00	8.645	nL/L	-14	30	u
Toluene	1.4889	1.4352	10.00	9.640	nL/L	-4	30	u
Tetrachloroethene	0.5096	0.4585	10.00	8.996	nL/L	-10	30	u
Ethylbenzene	1.8121	1.8131	10.00	10.01	nL/L	0	30	u
m,p-Xylenes	1.6901	1.6844	20.00	19.93	nL/L	0	30	m u
o-Xylene	1.5787	1.5482	10.00	9.809	nL/L	-2	30	u
1,3,5-Trimethylbenzene	2.1133	2.0270	10.00	9.592	nL/L	-4	30	u
1,2,4-Trimethylbenzene	1.9469	1.9880	10.00	10.21	nL/L	2	30	u
1,4-Dichlorobenzene	1.3146	1.2103	10.00	9.209	nL/L	-8	30	u
Bromofluorobenzene	0.7732	0.7674	10.00	9.923	nL/L	-1	30	u

ISTD (ICAL 278_025)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	924937	918113	-0.74	27.18	27.20	0.02
1,4-Difluorobenzene	3256000	3227000	-0.89	31.90	31.93	0.03
Chlorobenzene-d5	2877000	3001000	4.31	41.76	41.79	0.03

BO 10/07/09 [1,4-Dioxane]: Picked or reassigned peak . [general version]

BO 10/07/09 [m,p-Xylenes]: Combined split peak . [general version]

!=warning -=low bias m=manual integration u=use v=ICV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1209404057

Date : 10/07/09 Reference : 278_025
Sequence : MSAIR01 280 Analyzed : 10/06/09 09:38

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	924937	27.18	3256000	31.90	2877000	41.76
		LOWER LIMIT	554962	26.85	1953600	31.57	1726200	41.43
		UPPER LIMIT	1294912	27.51	4558400	32.23	4027800	42.09
002	CCV/BS	QC515614	918113	27.20	3227000	31.93	3001000	41.79
003	BSD	QC515615	904655	27.20	3305000	31.93	2962000	41.79
004	BLANK	QC515616	911241	27.21	3203000	31.94	2931000	41.79
005	SAMPLE	214999-005	910357	27.21	3297000	31.93	2863000	41.80
006	SAMPLE	214999-006	927616	27.20	3323000	31.93	2730000	41.79
007	SAMPLE	214999-007	938818	27.20	3336000	31.93	2840000	41.79
008	SAMPLE	214999-001	945638	27.18	3353000	31.91	2789000	41.77
009	SAMPLE	214999-002	929163	27.19	3324000	31.91	2835000	41.77
010	SAMPLE	214999-003	924807	27.19	3355000	31.91	2772000	41.77
011	SAMPLE	214999-004	961967	27.19	3431000	31.92	2400000	41.78
012	SAMPLE	215048-001	963688	27.19	3461000	31.92	2708000	41.77
013	SAMPLE	214999-003	988617	27.19	3544000	31.91	2832000	41.77
014	SAMPLE	214999-004	980509	27.19	3491000	31.91	2478000	41.77
015	SAMPLE	215048-001	934789	27.19	3498000	31.92	2593000	41.77

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209402039

Instrument : MSAIR01 Begun : 10/05/09 09:34
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	278_001	X	BFB			10/05/09 09:34	1.0	1	
002	278_002	X	QC515024	Air	155636	10/05/09 10:34	1.0	2 1	
003	278_003	X	QC515025	Air	155636	10/05/09 11:34	1.0	2 1	
004	278_004	X	NONE			10/05/09 12:33	1.0	1	
005	278_005	X	CALIB IB			10/05/09 13:33	1.0	1	
006	278_006	X	NONE			10/05/09 14:33	1.0	3 1	
007	278_007	X	NONE			10/05/09 15:32	1.0	3 1	
008	278_008	X	NONE			10/05/09 16:32	1.0	4 1	
009	278_009	X	NONE			10/05/09 17:33	1.0	4 1	
010	278_010	X	NONE			10/05/09 18:32	1.0	4 1	
011	278_011	X	NONE			10/05/09 19:32	1.0	5 1	
012	278_012	X	NONE			10/05/09 20:32	1.0	5 1	
013	278_013	X	NONE			10/05/09 21:32	1.0	5 1	
014	278_014	X	NONE			10/05/09 22:31	1.0	5 1	
015	278_015	TUN	BFB			10/05/09 23:31	1.0	1	
016	278_016	X	NONE			10/06/09 00:30	1.0	2 1	
017	278_017	IB	CALIB IB			10/06/09 01:41	1.0	1	
018	278_018	X	NONE			10/06/09 02:40	1.0	3 1	
019	278_019	ICAL	NONE			10/06/09 03:40	1.0	3 1	
020	278_020	ICAL	NONE			10/06/09 04:39	1.0	4 1	
021	278_021	ICAL	NONE			10/06/09 05:40	1.0	4 1	
022	278_022	ICAL	NONE			10/06/09 06:39	1.0	4 1	
023	278_023	ICAL	NONE			10/06/09 07:39	1.0	5 1	
024	278_024	ICAL	NONE			10/06/09 08:39	1.0	5 1	
025	278_025	ICAL	NONE			10/06/09 09:38	1.0	5 1	
026	278_026	ICAL	NONE			10/06/09 10:38	1.0	5 1	
027	278_027	IB	NONE			10/06/09 11:38	1.0	1	
028	278_028	XICV	NONE			10/06/09 12:38	1.0	2 1	
029	278_029	IB	NONE			10/06/09 13:38	1.0	1	
030	278_030	ICAL	NONE			10/06/09 14:38	1.0	3 1	
031	278_031	ICV	NONE			10/06/09 15:39	1.0	2 1	

SJD 10/06/09 : Re-ran low point due to incorrect method loaded for that point

BO 10/07/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: SJD Date: 10/06/09 Reviewer: BO Date: 10/07/09

Standards used: 1=S13044 2=S13086 3=S13093 4=S13092 5=S13091

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1209404057

Instrument : MSAIR01 Begun : 10/07/09 14:17
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	280_001	TUN	BFB			10/07/09 14:17	1.0	1	
002	280_002	CCV/BS	QC515614	Air	155785	10/07/09 15:21	1.0	2 1	
003	280_003	BSD	QC515615	Air	155785	10/07/09 16:21	1.0	2 1	
004	280_004	BLANK	QC515616	Air	155785	10/07/09 17:20	1.0	1	
005	280_005	SAMPLE	214999-005	Air	155785	10/07/09 18:20	2.06	1	
006	280_006	SAMPLE	214999-006	Air	155785	10/07/09 19:20	2.07	1	
007	280_007	SAMPLE	214999-007	Air	155785	10/07/09 20:20	2.11	1	
008	280_008	SAMPLE	214999-001	Air	155785	10/07/09 21:20	26.64	1	1:TCE=61
009	280_009	SAMPLE	214999-002	Air	155785	10/07/09 22:21	26.64	1	1:TCE=89
010	280_010	SAMPLE	214999-003	Air	155785	10/07/09 23:22	27.60	1	
011	280_011	SAMPLE	214999-004	Air	155785	10/08/09 00:23	259.2	1	
012	280_012	SAMPLE	215048-001	Air	155785	10/08/09 01:23	265.2	1	
013	280_013	SAMPLE	214999-003	Air	155785	10/08/09 08:29	13.80	1	
014	280_014	SAMPLE	214999-004	Air	155785	10/08/09 09:30	129.6	1	
015	280_015	SAMPLE	215048-001	Air	155785	10/08/09 10:29	132.6	1	

SJD 10/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 15.

BO 10/12/09 : Matrix spikes were not performed for this analysis in batch 155785 because they are not required by the method.

Analyst: SJD Date: 10/12/09 Reviewer: BO Date: 10/12/09

Standards used: 1=S13044 2=S13086

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PROJECT _____

Continued From Page _____

~~Property Date~~	Sample ID	Can ID	Initial pressure (psia)	Final pressure (psia)	Dilution Fac	Comments
9/23 MAP	214897-005	C00014	1.5 added	30.00	42.6x	20x of 2.13 x C00110
↓	006	C00203	↓	↓	43.2x	20x of 2.16 x C00172
Sam 9/26/09	214998-001	C00049	10.30	23.31	2.26x	
	-002	C00139	11.77	23.41	1.99x	
	214999-001	C00064	10.66	23.64	2.22x	
	-002	C00124	10.62	23.54	2.22x	
	-003	C00123	10.20	23.50	2.30x	
	-004	C00058	10.91	23.60	2.16x	
	-005	C00197	11.41	23.54	2.06x	
	-006	C00153	11.38	23.58	2.07x	
	-007	C00147	11.18	23.56	2.11x	
	214904-001	C00142	7.74	24.11	3.11x	
	-002	C00126	11.94	23.54	1.97x	
	-003	C00075	11.35	23.46	2.07x	
	-004	C00176	10.58	23.40	2.21x	
	-005	C00193	10.30	23.70	2.30x	
	-006	C00132	10.73	23.54	2.19x	
	-007	C00128	11.37	23.74	2.09x	
	-008	C00078	11.34	23.58	2.08x	
	-009	C00160	10.77	23.94	2.22x	
	-010	C00113	11.05	24.07	2.18x	
	-011	C00161	10.98	23.81	2.17x	
	-012	C00072	11.19	24.13	2.16x	
	-013	C00107	11.26	23.64	2.10x	
	-014	C00095	11.23	23.61	2.11x	
	215048-001	C00140	10.78	23.87	2.21x	
↓	BLANK	C1703	—	—	1x	
Sam 10/6/09	214897-009	C00017	1.5 added	30.0 total	42.2x	20x of 2.11x can C00062
	214999-004	C00212	1.5 added	30.0 total	43.2x	20x of 2.16x can C00052
	215048-001	C00220	1.5 added	30.0 total	44.2x	20x of 2.21x can C00140
↓	BLANK	C1705	—	—	1x	
10/8/09	214999-1	C00045	3.0 added	30.0 total	22.2x	10x of 2.22x can C00064
	-2	C00213	1.5 added	30.0 total	44.4x	20x of 2.22x can C00124
↓	BLANK	C00227	—	—	1x	

Continued on Page

Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Appendix C
Technical Memorandum: Soil Vapor Field Parameter Collection and Interpretation BSVE System, Honeywell 34th Street Facility, Phoenix, Arizona

Soil Vapor Field Parameter Collection and Interpretation, BSVE System, Honeywell 34th Street Facility, Phoenix, Arizona

PREPARED FOR: Troy Kennedy/Honeywell International Inc.

PREPARED BY: CH2M HILL

COPIES:

DATE: November 4, 2009

PROJECT NUMBER: 371995.ES.61.12

1.0 Introduction

This technical memorandum presents recently collected field parameter data and compares these data to fixed-based laboratory analyses and thermal oxidizer (Thermox) BTU consumption for the purposes of determining the optimum field analytical instruments for the Honeywell International Inc. (Honeywell) biologically-enhanced soil-vapor extraction (BSVE) project at the Honeywell 34th Street Aerospace Engines Product Center (Honeywell facility; or the Facility). This comparison is also being conducted to determine the optimal approach for estimation of mass removal during BSVE operations. Figure 1 provides a site vicinity map of the Honeywell facility. Based on this effort, it is recommended that the RKI Eagle™ be used for field measurements of total petroleum hydrocarbons (TPH), methane, lower explosive limit (LEL), oxygen, and carbon dioxide. For mass estimation purposes it is recommended that the Thermox BTU consumption approach be used.

This technical memorandum includes:

- **1.0 Introduction,** presents a summary of recommendations and the purpose and organization of the memorandum.
- **2.0 Sampling Procedures,** presents a description of equipment, calibration and sample collection procedures, analytical methods used during the sampling event, and the sampling locations.
- **3.0 Data Presentation and Interpretation,** presents the field monitoring and laboratory data collected during sampling and evaluates how oxygen, carbon dioxide, methane, and TPH concentrations measured by different instruments compare to each other and to laboratory analytical results.
- **4.0 Recommendations,** summarizes the findings of the sampling.
- **5.0 References,** presents the cited references.

2.0 Sampling Procedures

Soil-vapor monitoring and sampling were conducted between June 26 and July 1, 2009. Samples were collected for analysis from 14 locations, including six BSVE injection/extraction wells, four sentinel monitoring wells, two process monitoring wells, one sub-slab monitoring well, and the inlet to the BSVE treatment system. Sampling locations are presented in Figure 2. The BSVE treatment system inlet was monitored and sampled on two occasions (June 26 and June 27, 2009). Soil gas was analyzed using field methods, and samples were collected and submitted to a fixed-based laboratory.

Soil-vapor monitoring procedures were performed in accordance with the *Master Field Sampling Plan, Honeywell International Inc., Appendix F(Standard Operating Procedures, Soil Vapor Sample Collection), Honeywell 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2007). This memorandum does not include a detailed description of field procedures described in the Soil Gas Monitoring and Sampling SOP; however, procedures specific to sampling, including the type of field equipment used, calibration procedures, and analytical methods, are discussed below.

2.1 Field Monitoring Equipment

The monitoring equipment consisted of three types of air monitoring devices during sampling: the Photovac MicroFID, the Landtec GEM™2000, and the RKI Eagle™. Each type of monitoring equipment measures selected field parameters using different sensors. The monitoring equipment and parameters they monitor are discussed below.

2.1.1 GEM™2000

The GEM™2000 can measure oxygen, carbon dioxide, percent methane, and percent LEL. It uses an infrared sensor capable of measuring large quantities of methane. However, because the sensor is specific to methane, the GEM™2000 has limitations when measuring TPH. Due to this sensor limitation, no TPH reading from the GEM™2000 was evaluated for this study. Attachment 1 has the specifications provided by the manufacturer on the GEM™2000.

2.1.2 RKI Eagle™

The RKI Eagle™ can measure oxygen, carbon dioxide, percent methane, percent LEL, and TPH. It uses a catalytic sensor to measure methane and TPH. The RKI Eagle™ does not display a value for methane or TPH when soil-vapor oxygen concentrations are less than 10 percent. For these situations, methane and TPH concentrations were measured by increasing the oxygen to above 10 percent in the soil vapor using a dilution valve connected to ambient air. Readings are collected at these diluted concentrations; the ratio of dilution based on oxygen values is used to determine the undiluted methane or TPH reading. For methane readings, an in-line granular-activated carbon filter was used. These procedures are described in greater detail in the Soil Gas Monitoring and Sampling SOP. See Attachment 2 for the specifications provided by the RKI Eagle™ manufacturer.

2.1.3 Photovac MicroFID

The Photovac MicroFID measures TPH and can be used to measure methane by passing influent vapor through a granular-activated carbon filter. The Photovac uses a flame

ionization detector to measure TPH. The Photovac does not display a value for methane or TPH when soil-vapor oxygen concentrations are less than 15 percent. For these situations, methane and TPH concentrations were measured by increasing the oxygen to above 15 percent in the soil vapor using a dilution valve connected to ambient air. Readings are collected at these diluted concentrations and are converted based on the dilution ratio to determine the undiluted methane or TPH reading. For methane readings, an in-line granular-activated carbon filter was used. These procedures are described in greater detail in the Soil Gas Monitoring and Sampling SOP. See Attachment 3 for the specifications provided by the Photovac MicroFID manufacturer.

A minimum flow rate of 10 liters per minute was maintained during purging to ensure that the flow of soil vapor through the sample train was sufficient to easily overcome the combined individual pumping rates of each instrument. This procedure was implemented to prevent any unwanted backflow of ambient air up the exhaust line of the sample train. In addition, at least 2 feet of tubing were added to the exhaust line beyond the furthest soil-vapor monitoring instrument downstream of the sample train exhaust to prevent measuring any potential diffusion of exhaust air into the sampling line.

2.2 Calibration Procedures and Response Factors

Each instrument was calibrated using two-point calibrations with a third point check using a midlevel calibration standard. The calibration procedure for each instrument is described below.

The GEM™2000 was calibrated using carbon dioxide standards of 0 percent and 35 percent, with a 15 percent standard check, and was calibrated for oxygen using 0 percent and 20.9 percent, with a 4 percent standard check. Because the infrared sensor is sensitive to other gases, the GEM™2000 was only calibrated with methane. The methane standards used to calibrate the GEM™2000 were 0 percent and 50 percent, with a 15 percent standard check.

The RKI Eagle™ was calibrated similarly to the GEM™2000 for oxygen and carbon dioxide, using carbon dioxide standards of 0 percent and 35 percent, with a 15 percent standard check, and using oxygen standards of 0 percent and 20.9 percent, with a 4 percent standard check.

The Title V air permit for the Honeywell facility that governs operation of the BSVE system requires that propane is used for calibration of instruments used for TPH monitoring (CH2M HILL, 2009). Therefore the methane/TPH sensors of the Photovac MicroFID and RKI Eagle™ were calibrated using propane at concentrations of 10,000 parts per million (ppm), 500 ppm, and 0 ppm.

Response factors were calculated for the RKI Eagle™ and Photovac MicroFID to measure methane after performing instrument calibration with propane. The RKI Eagle™ and Photovac MicroFID were calibrated with propane as described above, and a certified 10,000-ppm methane calibration standard was applied to each instrument and measured. A response factor was calculated for each instrument based on the calibration standard concentration and the concentrations measured by the instruments.

The response factors for methane are shown below for the two instruments calibrated with propane:

- Photovac = 1.28
- RKI Eagle™ = 1.56

Response factors were used only in the measurement of methane, and this analysis is discussed in more detail in Section 3.0.

2.3 Analytical Methods

Samples were collected using SUMMA™ canisters. Methane and TPH (C_1-C_9) analysis by Method TO-3M was performed on all samples collected. Oxygen and carbon dioxide analysis by American Society for Testing and Materials (ASTM) Method 1946 was performed at nine locations, including the BSVE system inlet, extraction wells, and process monitoring wells. In addition, duplicate samples analyzed by Methods TO-3M and ASTM 1946 were collected at three BSVE extraction well locations (CH2M HILL, 2009). Table 1 summarizes the data collection and laboratory analyses by monitoring location.

3.0 Data Presentation and Interpretation

Data were evaluated by comparing readings measured with different field instruments at the same location to one another and by comparing field instrument readings to laboratory analytical results. Comparison of field instrument readings to laboratory analytical results was used to evaluate the accuracy of each field instrument. In addition, the TPH field readings and laboratory TPH analytical results were compared to the calculated BTU consumption by the Thermox unit to determine the best method for estimating mass removal by the BSVE system. The sampling data are presented below by compound.

Laboratory results for the sample collected from BSVE injection/extraction well BV-19N in July 2009 indicate the sample was compromised and contained ambient air (not soil vapor). Field readings collected from BV-19N in July 2008, November 2008, and July 2009 indicate oxygen and carbon dioxide concentrations have ranged from <0.1 to 1.7 percent oxygen and 10.2 to 12.6 percent carbon dioxide. The laboratory results for oxygen and carbon dioxide for BV-19N were 20 and 1.1 percent, respectively, indicating the sample contained primarily ambient air. Based on this information, the discussion below does not include analysis of the laboratory results from BV-19N, nor do any statistics or calculations presented below include data from BV-19N. The data for BV-19N are presented in the tables of this memorandum; however, these data have not been included in figures presented in this section.

3.1 Oxygen

Table 2 and Figure 3 present oxygen data collected during the sampling event. Oxygen concentrations measured by the GEM™2000 ranged from <0.1 to 18.4 percent; oxygen concentrations measured by the RKI Eagle™ ranged from 0.6 to 18.4 percent; and the oxygen concentrations measured by the laboratory using Method ASTM 1946 ranged from 3.8 to 19 percent. Both field instruments measured lower oxygen concentrations than the laboratory result for all samples collected. The oxygen concentration read by the RKI Eagle™ was closer to the laboratory result in all but one instance, when the RKI Eagle™ and GEM™2000 measured the same oxygen concentration of 18.4 percent for monitoring well PMW-9-M. As shown in Figure 3, the slope of the regression line of the RKI Eagle™ data

plotted against the laboratory results was closer to 1 and had a higher correlation than the slope of the regression line and correlation for the GEM™2000 data plotted against the laboratory results. It appears that both the GEM™2000 and the RKI Eagle™ agree well with the laboratory analysis for oxygen; however, the RKI Eagle™ does provide a somewhat better correlation.

3.2 Carbon Dioxide

Table 3 and Figure 4 present carbon dioxide data collected during the sampling event. Carbon dioxide concentrations measured by the GEM™2000 ranged from 3.3 to 7.9 percent; carbon dioxide concentrations measured by the RKI Eagle™ ranged from 3.8 to 8.6 percent; and the carbon dioxide concentrations measured by the laboratory using Method ASTM 1946 ranged from 2.4 to 8.5 percent. The carbon dioxide concentration measured by the RKI Eagle™ was closer to the laboratory result in 8 of 12 samples; however, as shown in Figure 4, the slopes of the regression lines of the RKI Eagle™ and GEM™2000 data plotted against the laboratory results were not significantly different. Both instruments correlated relatively well with laboratory measurements and with each other. The correlations are not as good as they are for oxygen, but they appear sufficiently accurate for BSVE monitoring purposes. There does not appear to be a notable difference in correlation with laboratory analysis between these instruments for carbon dioxide.

3.3 Methane

As presented in Section 2.0, the RKI Eagle™ and Photovac MicroFID (FID) were calibrated with propane; therefore, response factors listed in Section 2.0 were used to adjust methane measurements made with these instruments.

In addition, the two FID results for methane were calculated using the oxygen concentrations (with and without dilution) determined by both the GEM™2000 and the RKI Eagle™ and applying these ratios to calculate non-diluted FID readings when the soil-vapor oxygen concentration is less than 15 percent. As presented in Table 2 the oxygen readings differed between the GEM™2000 and RKI Eagle™. As a result, one FID methane value was calculated using the oxygen concentration measured by the GEM™2000 (FID-1), and another FID methane value was calculated using the oxygen concentration measured by the RKI Eagle™ (FID-2). These results are presented in Table 4 and Figure 5.

Table 4 and Figure 5 present methane data collected during the sampling event with the application of a response factor to adjust RKI Eagle™ and Photovac MicroFID readings to account for this instrument's calibration with propane.

The average field instrument reading for each instrument indicated the RKI Eagle™ exhibited the field methane readings closest to the laboratory result, followed by the Photovac MicroFID, and lastly by the GEM™2000. The field instrument reading correlations of the GEM™2000 and the Photovac MicroFID with the laboratory results were influenced significantly by monitoring well SMW-2-M. The correlation variance was exaggerated due to the relatively low laboratory result of 2.0 ppm for SMW-2-M compared to the GEM™2000, FID-1, and FID-2 readings for that well (1,000, 193, and 542 ppm, respectively). The instrument that most closely matched laboratory analytical results, either when including or excluding data from SMW-2-M, was the RKI Eagle™.

As presented in Figure 5, the slope of the regression line of the RKI Eagle™ data plotted against the laboratory results was better than the slope of the regression line of data from all other field instruments plotted against the laboratory results. In addition, the correlation was highest for the RKI Eagle™ ($R^2 = 0.982$), followed by the FID-2 ($R^2 = 0.945$), GEM™2000 ($R^2 = 0.92$), and FID-1 ($R^2 = 0.898$).

Based on this information, the RKI Eagle™ correlates better with the laboratory results for methane than the GEM™2000 or the Photovac MicroFID.

3.4 TPH

The measurement of TPH is more complex due to the wide variety of hydrocarbon molecules that make up TPH. TPH readings are measured and displayed by the RKI Eagle™ and Photovac MicroFID in a volumetric form (e.g., ppm or percent). To provide for better comparative analysis, the TPH concentration readings measured by the RKI Eagle™ and Photovac MicroFID were converted from the volumetric measurements displayed by each instrument to a mass per unit volume. This allowed for suitable comparison of instrument readings against laboratory results, and also provided results in units which are consistent with metrics associated with the BSVE system operation. Additionally, the energy, or BTU consumption, by the Thermox system was calculated and compared to the field and laboratory analysis of samples collected from the combined extracted gas (BSVE inlet).

TPH at the BSVE inlet was calculated from the BTU consumption by the Thermox unit (See Attachment 4 for more details). The results were then compared to the TPH analytical results and the field readings collected using the RKI Eagle™ and the Photovac MicroFID. Figure 6 illustrates the comparison between the field TPH readings, laboratory TPH analysis, and the estimated TPH values from the BTU consumption calculations as well as the estimated TPH mass removal by the Thermox unit based on the BTU consumption calculations. As of July 31, 2009 the Thermox unit BTU consumption estimates that 63,300 pounds (lbs) of TPH have been removed by volatilization. Extrapolating this calculation to the end of the Third Quarter 2009 (September 30, 2009), the mass removed by volatilization as of September 30, 2009 is 258,200 lbs.

As discussed in Section 2.0, the methane sensor of the GEM™2000 is an infrared sensor specifically designed for methane. This sensor is not designed for the measurement of TPH; therefore, the GEM™2000 is not discussed in this section.

Table 5 presents field instrument measurement of TPH and laboratory analytical results for TPH by Method TO-3M, in addition to the BTU calculated TPH estimate using data from the BSVE inlet. Figure 6 presents this information graphically. Speciation of TPH is presented in Table 6. Individual TPH constituents are presented for methane (C_1) through n-hexane (C_6) and C_7-C_9 are reported as a summation. The primary constituent of TPH was methane. Ethane (C_2) and propane (C_3) were not detected in any samples. Low concentrations of n-butane (C_4) (14.3 to 20.7 micrograms per liter [µg/L]) were detected in 3 of 17 samples, with the remainder of samples exhibiting non-detectable concentrations. Similarly, low concentrations of n-pentane (C_5) (6.8 to 70.8 µg/L) were detected in 8 of 17 samples, with the remainder of samples exhibiting non-detectable concentrations. Concentrations of n-hexane (C_6) and the composite C_7 - C_9 were observed in higher concentrations than the observed

concentrations of n-butane or n-pentane, with maximum concentrations of 458 and 916 µg/L, respectively. However, detections of n-hexane and C_7 - C_9 were generally two to three orders of magnitude less than the methane concentrations observed in the same sampling locations. The data presented in Table 6 clearly demonstrate that methane is the most prevalent petroleum hydrocarbon in the range C_1 - C_9.

TPH concentrations measured by the RKI Eagle™ ranged from <1.8 to 33,360 µg/L; TPH concentrations measured by the Photovac MicroFID ranged from <0.9 to 113,149 µg/L; and the TPH concentrations measured by the laboratory using Method TO-3M ranged from 15.5 to 16,418 µg/L. The TPH concentrations measured by the RKI Eagle™ were closer to the laboratory result than the Photovac MicroFID measurements in all 17 instances. The Photovac MicroFID TPH readings did not vary significantly when calculated on the basis of the GEM™2000 oxygen concentration (FID-1) versus the RKI Eagle™ oxygen concentration (FID-2).

Figure 6 illustrates the relationship between the various estimation methods. All three field instruments correlate relatively well with the lab analysis, however in all cases the results are consistently higher than the laboratory analysis. The RKI Eagle appears to best correlate and provide the measurement closest to the laboratory values. In addition, the daily BTU consumption calculations were compared to the daily FID readings and the two RKI readings and laboratory results. These results are illustrated on Figure 7 and indicate that the BTU calculation is closer to the RKI Eagle than to the other instruments or to the lab results.

4.0 Recommendations

Based on this study, it is recommended that field soil gas monitoring data for the BSVE system be collected using the RKI Eagle™ as follows:

- TPH as propane (no carbon filter)
- Methane (same as TPH but with a carbon filter and corrected based on the measured methane response factor)
- LEL (as propane, meaning 100-percent LEL = 2.1 percent propane)
- Carbon dioxide and oxygen

It should be noted that because LEL is measured by the RKI Eagle™ using the same detector as TPH and simply converted by the instrument to LEL, all the correlations and conclusions regarding TPH should be equally applicable to LEL. Use of the GEM™2000 and Photovac MicroFID will be discontinued.

It is also recommended that mass removal estimates be based upon BTU consumption since it's the most direct measure of hydrocarbon removal. Monitoring of the extracted gas using the RKI Eagle and MicroFID, as well as periodic laboratory analysis, will continue and adjustments to this approach will be proposed as appropriate.

5.0 References

CH2M HILL. 2007. *Master Field Sampling Plan, Appendix F, Honeywell 34th Street Facility, Phoenix, Arizona.*

_____. 2009. *Biologically-Enhanced Soil Vapor Extraction System Operations and Monitoring Plan, Honeywell 34th Street Facility, Phoenix, Arizona.*

Tables

TABLE 1
Summary of Data Collection and Laboratory Analyses
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Location Type	Field Parameters[a]	ASTM 1946[b]	TO-3M[c]
P-32	Sub-slab Monitoring Well	X	--	X
SMW-2-M	Sentinel Monitoring Well	X	--	X
SMW-4-U	Sentinel Monitoring Well	X	--	X
SMW-4-M	Sentinel Monitoring Well	X	--	X
SMW-4-L	Sentinel Monitoring Well	X	--	X
BSVE-INLET[d]	BSVE system inlet	X	X	X
ASE-46A	BSVE Injection/Extraction Well	X	X	X
BV-1N	BSVE Injection/Extraction Well	X	X	X
BV-9N	BSVE Injection/Extraction Well	X	X[e]	X[e]
BV-10N	BSVE Injection/Extraction Well	X	X[e]	X[e]
BV-13N	BSVE Injection/Extraction Well	X	X[e]	X[e]
BV-19N	BSVE Injection/Extraction Well	X	X	X
PMW-9-U	Process Monitoring Well	X	X	X
PMW-9-M	Process Monitoring Well	X	X	X

Notes:
X = Monitoring or analysis was performed
-- = Monitoring or analysis was not performed
BSVE = Biologically-enhanced Soil Vapor Extraction
[a] Field parameters include measurement of oxygen, carbon dioxide, methane, and total petroleum hydrocarbons with both a GEM 2000 and RKI Eagle field monitoring instruments, and measurement of methane and total petroleum hydrocarbons with a flame ionization detector.
[b] Analytical Method ASTM 1946 was used for laboratory analysis of oxygen and carbon dioxide.
[c] Analytical Method TO-3M was used for laboratory analysis of methane and total petroleum hydrocarbons (C_1 through C_9).
[d] Field parameters and laboratory samples were collected from the BSVE-INLET location on two occassions (6/26/20009 and 6/27/2009).
[e] Duplicate sample collected.

TABLE 2

Comparison of Oxygen Results from GEM 2000, RKI Eagle, and Laboratory Analysis by Method ASTM 1946

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	Sample Purpose	GEM 2000 Oxygen (%)	RKI Eagle Oxygen (%)	Laboratory Result Oxygen (%)
BV-10N	06/30/09	REG	<0.1	0.6	3.9
BV-10N	06/30/09	FD	<0.1	0.6	3.8
BSVE-INLET	06/26/09	REG	6.2	6.8	8.3
BSVE-INLET	06/27/09	REG	6.8	7.4	8.6
BV-1N	07/01/09	REG	9.5	10.9	11
BV-9N	06/30/09	REG	10.9	11.6	12
BV-9N	06/30/09	FD	10.9	11.6	12
ASE-46A	07/01/09	REG	11.6	12.7	13
BV-13N	06/30/09	REG	9.2	9.9	16
BV-13N	06/30/09	FD	9.2	9.9	12
PMW-9-U	06/29/09	REG	14.5	15.3	16
PMW-9-M	06/29/09	REG	18.4	18.4	19
BV-19N	07/01/09	REG	0.1	1.7	20

Notes:

REG = Normal sample

FD = Field duplicate

TABLE 3

Comparison of Carbon Dioxide Results from GEM 2000, RKI Eagle, and Laboratory Analysis by Method ASTM 1946

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	Sample Purpose	GEM 2000 Carbon Dioxide (%)	RKI Eagle Carbon Dioxide (%)	Laboratory Result Carbon Dioxide (%)
BV-19N	07/01/09	REG	11.9	12.6	1.1
ASE-46A	07/01/09	REG	6.6	7.4	2.4
BV-13N	06/30/09	REG	6	5	2.7 J
BV-13N	06/30/09	FD	6	5	5.7 J
PMW-9-M	06/29/09	REG	3.3	3.8	3.9
PMW-9-U	06/29/09	REG	5.8	6.2	6.6
BV-9N	06/30/09	REG	6.7	7	6.9
BV-9N	06/30/09	FD	6.7	7	6.8
BV-1N	07/01/09	REG	6.2	6.6	7
BV-10N	06/30/09	REG	6.8	7	7.1
BV-10N	06/30/09	FD	6.8	7	7.4
BSVE-INLET	06/27/09	REG	7.7	5.2	8.3
BSVE-INLET	06/26/09	REG	7.9	8.6	8.5

Notes:
REG = Normal sample
FD = Field duplicate
J = Estimated value

TABLE 4

Comparison of Methane Results from RKI Eagle ,Photovac FID, GEM 2000, and Laboratory Analysis by Method TO-3M

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	Sample Purpose	GEM 2000 Methane (ppm)	RKI Eagle[a,b] Methane (ppm)	FID-1[a,c] Methane (ppm)	FID-2[a,c] Methane (ppm)	Laboratory Result Methane (ppm)
PMW-9-U	06/29/09	REG	<1,000	<1.6	<0.95	<0.64	1.3
PMW-9-M	06/29/09	REG	<1,000	<1.6	23	23	1.6
SMW-2-M	06/27/09	REG	1,000	<1.6	193	542	2.0
SMW-4-U	06/29/09	REG	<1,000	<1.6	<0.91	<0.94	2.8
SMW-4-M	06/29/09	REG	<1,000	<1.6	<0.88	<0.87	3.4
BV-13N	06/30/09	REG	<1,000	<1.6	360	357	110
BV-13N	06/30/09	FD	<1,000	<1.6	360	357	250
P-32	06/29/09	REG	<1,000	<1.6	<0.64	<0.64	160
ASE-46A	07/01/09	REG	7,000	3,048	5,647	5,921	1,200
BV-9N	06/30/09	REG	4,000	1,375	3,459	2,969	1,900
BV-9N	06/30/09	FD	4,000	1,375	3,459	2,969	1,900
BV-1N	07/01/09	REG	5,000	1,000	1,899	2,463	2,000
BV-19N	07/01/09	REG	38,000	48,403	62,738	67,253	3,400
BV-10N	06/30/09	REG	30,000	20,397	19,176	24,062	21,000
BV-10N	06/30/09	FD	30,000	20,397	19,176	24,062	22,000
SMW-4-L	06/29/09	REG	21,000	24,759	36,080	39,601	22,000
BSVE-INLET	06/27/09	REG	20,000	26,962	29,258	31,699	22,000
BSVE-INLET	06/26/09	REG	33,000	26,571	38,343	36,027	23,000

Notes:

REG = Normal sample

FD = Field duplicate

FID = Flame ionization detector

FID-1 = FID reading based on GEM 2000 oxygen reading

FID-2 = FID reading based on RKI Eagle oxygen reading

[a] RKI Eagle and FID methane readings adjusted with response factors of 1.56 and 1.28, respectively, due to calibration of these instruments with propane.

[b] Dilution of soil vapor is required to obtain RKI methane readings when the oxygen concentration in soil vapor is less than 10%. In such cases, the oxygen concentration before and after dilution is used to calculate the non-diluted RKI methane reading.

[c] Dilution of soil vapor is required to obtain FID readings when the oxygen concentration in soil vapor is less than 15%. In such cases, the oxygen concentration before and after dilution is used to calculate the non-diluted FID reading. Variability in the oxygen concentration measured by the GEM2000 and RKI Eagle result in variability between the calculated FID-1 and FID-2 values. Therefore, two FID values are presented.

TABLE 5

Comparison of Total Petroleum Hydrocarbon Results from GEM 2000, Photovac FID, RKI Eagle, and Laboratory Analysis by Method TO-3M

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	Sample Purpose	RKI Eagle[a] TPH (µg/L)	FID-1[b] TPH (µg/L)	FID-2[b] TPH (µg/L)	Laboratory Result TPH (µg/L)	BTU Calculated TPH (µg/L)
PMW-9-U	06/29/09	REG	<1.8	<1.33	<0.9	15.5	--
SMW-2-M	06/27/09	REG	<1.8	278	757	16.0	--
SMW-4-U	06/29/09	REG	<1.8	<1.28	<1.3	16.5	--
SMW-4-M	06/29/09	REG	<1.8	<1.24	<1.2	16.9	--
PMW-9-M	06/29/09	REG	<1.8	33	33	467	--
P-32	06/29/09	REG	<1.8	<0.90	<0.90	119	--
BV-13N	06/30/09	REG	54	1,077	1,069	140	--
BV-13N	06/30/09	FD	54	1,077	1,069	334	--
ASE-46A	07/01/09	REG	4,869	11,915	12,493	1068	--
BV-1N	07/01/09	REG	1,713	4,169	5,406	1508	--
BV-9N	06/30/09	REG	3,246	7,373	6,330	2321	--
BV-9N	06/30/09	FD	3,246	7,373	6,330	2426	--
BV-19N	07/01/09	REG	65,337	105,554	113,149	2574	--
BV-10N	06/30/09	REG	32,423	39,542	49,617	14342	--
BV-10N	06/30/09	FD	32,423	39,542	49,617	15454	--
SMW-4-L	06/29/09	REG	28,565	53,353	58,559	14,471	--
BSVE-INLET	06/27/09	REG	32,459	49,315	53,429	15,716	37,574
BSVE-INLET	06/26/09	REG	33,360	63,940	60,078	16,418	42,161

Notes:

-- = Not applicable

TPH = Total petroleum hydrocarbons

REG = Normal sample

FD = Field duplicate

FID = Flame ionization detector

FID-1 = FID reading based on GEM 2000 oxygen reading

FID-2 = FID reading based on RKI Eagle oxygen reading

BTU = British thermal unit

[a] Dilution of soil vapor is required to obtain RKI TPH readings when the oxygen concentration in soil vapor is less than 10%. In such cases, the oxygen concentration before and after dilution is used to calculate the non-diluted RKI TPH reading.

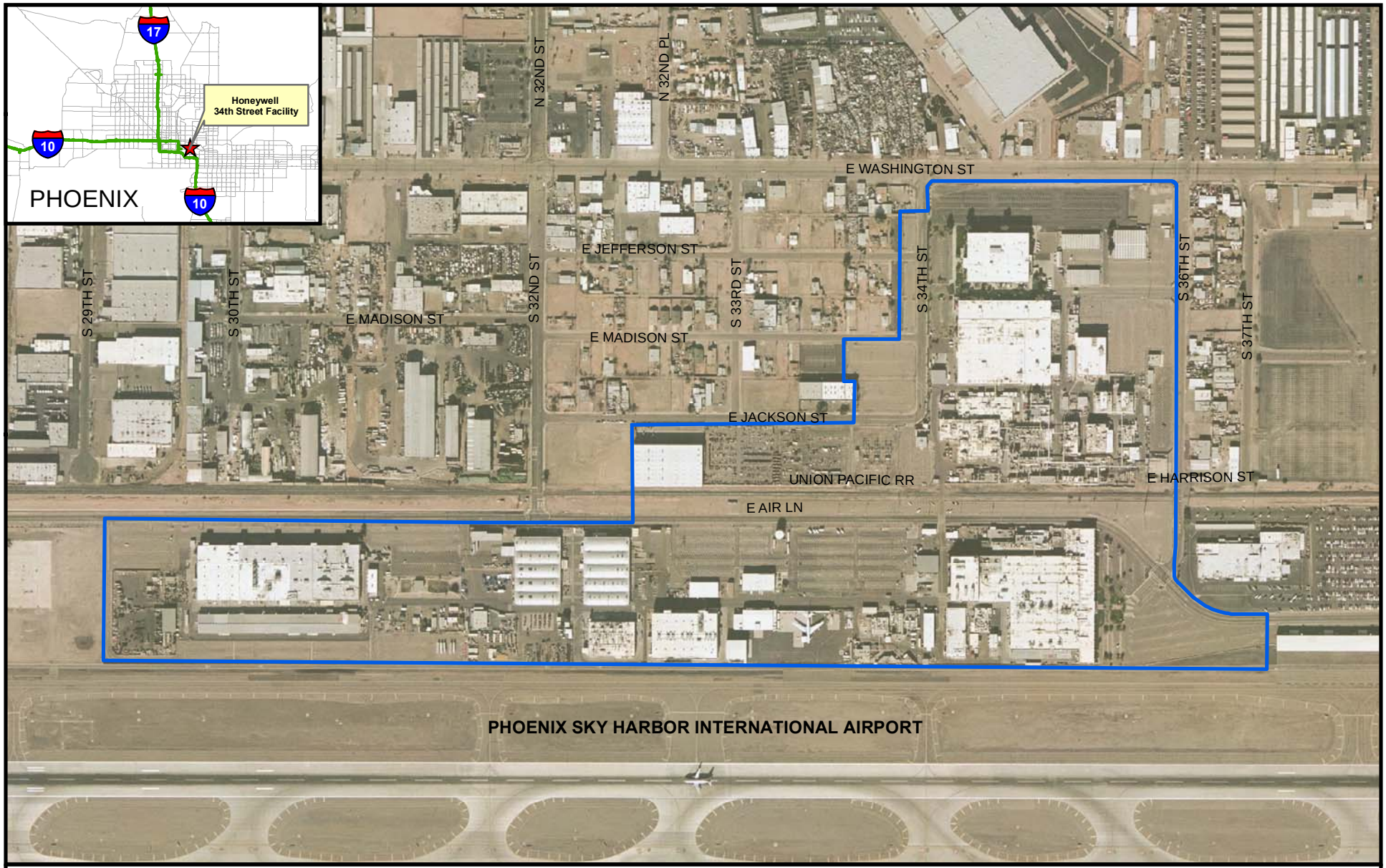
[b] Dilution of soil vapor is required to obtain FID readings when the oxygen concentration in soil vapor is less than 15%. In such cases, the oxygen concentration before and after dilution is used to calculate the non-diluted FID reading. Variability in the oxygen concentration measured by the GEM2000 and RKI Eagle result in variability between the calculated FID-1 and FID-2 values. Therefore, two FID values are presented.

TABLE 6
Total Petroleum Hydrocarbon Speciation Results by Method TO-3M
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	Sample Purpose	Methane (C_1) (µg/L)	Ethane (C_2) (µg/L)	Propane (C_3) (µg/L)	n-Butane (C_4) (µg/L)	n-Pentane (C_5) (µg/L)	n-Hexane (C_6) (µg/L)	Composite (C_{7-9}) (µg/L)	TPH[a] (µg/L)
PMW-9-U	06/29/09	REG	0.9	<2.3	<3.4	<4.5	<5.6	<6.7	<6.7	15.5
SMW-2-M	06/27/09	REG	1.3	<2.3	<3.4	<4.5	<5.6	<6.7	<6.7	16.0
SMW-4-U	06/29/09	REG	1.8	<2.3	<3.4	<4.5	<5.6	<6.7	<6.7	16.5
SMW-4-M	06/29/09	REG	2.2	<2.3	<3.4	<4.5	<5.6	<6.7	<6.7	16.9
PMW-9-M	06/29/09	REG	1.0	<2.3	<3.4	<4.5	<5.6	148	310	467
P-32	06/29/09	REG	105.0	<2.2	<3.2	<4.3	<5.3	<6.3	<6.3	119
BV-13N	06/30/09	REG	72.2	<2.3	<3.4	<4.5	<5.6	24.3	35.2	140
BV-13N	06/30/09	FD	164	<2.3	<3.4	<4.5	<5.6	56.4	106	334
ASE-46A	07/01/09	REG	787	<2.2	<3.2	<4.3	14.8	102	159	1068
BV-1N	07/01/09	REG	1310	<2.5	<3.6	<3.6	<5.9	45.8	144	1508
BV-9N	06/30/09	REG	1250	<2.3	<3.4	<4.5	18.9	236	811	2321
BV-9N	06/30/09	FD	1250	<2.3	<3.4	<4.5	18.9	236	916	2426
BV-19N	07/01/09	REG	2230	<2.3	<3.4	<4.5	10.6	95	233	2574
BV-10N	06/30/09	REG	13780	<2.3	<3.4	<4.5	7.1	127	423	14342
BV-10N	06/30/09	FD	14430	<2.3	<3.4	<4.5	7.1	130	881	15454
SMW-4-L	06/29/09	REG	14,430	<2.3	<3.4	20.7	6.8	7.0	<6.7	14,471
BSVE-INLET	06/27/09	REG	14,430	<2.5	<3.6	14.3	70.8	423	775	15,716
BSVE-INLET	06/26/09	REG	15,090	<2.5	<3.6	14.5	76.7	458	775	16,418

Notes:
TPH = Total petroleum hydrocarbons
REG = Normal sample
FD = Field duplicate
[a] TPH was calculated by the summation of C_1 through C_9; one half of the laboratory reporting limit was used in calculation for cases of non-detectable concentrations.

Figures



Legend

Honeywell Site Boundary

N
W E
S

0 300 600 1,200 Feet

FIGURE 1
VICINITY MAP

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

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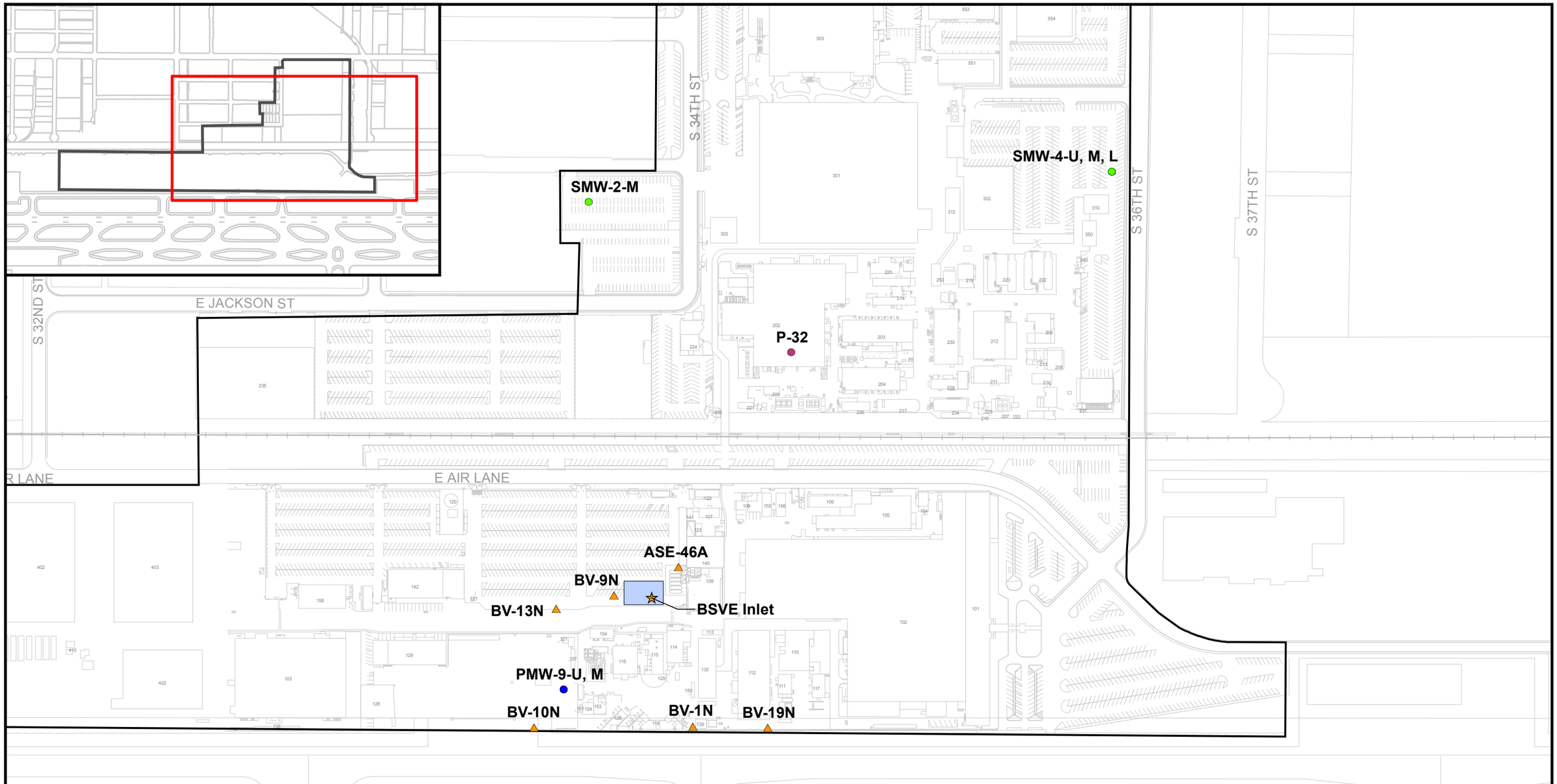


Legend

- BSVE Injection/Extraction Wells
- BSVE Treatment System Inlet
- Process Monitoring Wells
- Sentinel Monitoring Wells
- Sub-slab Monitoring Wells
- Railroad
- Street and Airport Features
- BSVE Treatment System
- Honeywell Facility

N W E S

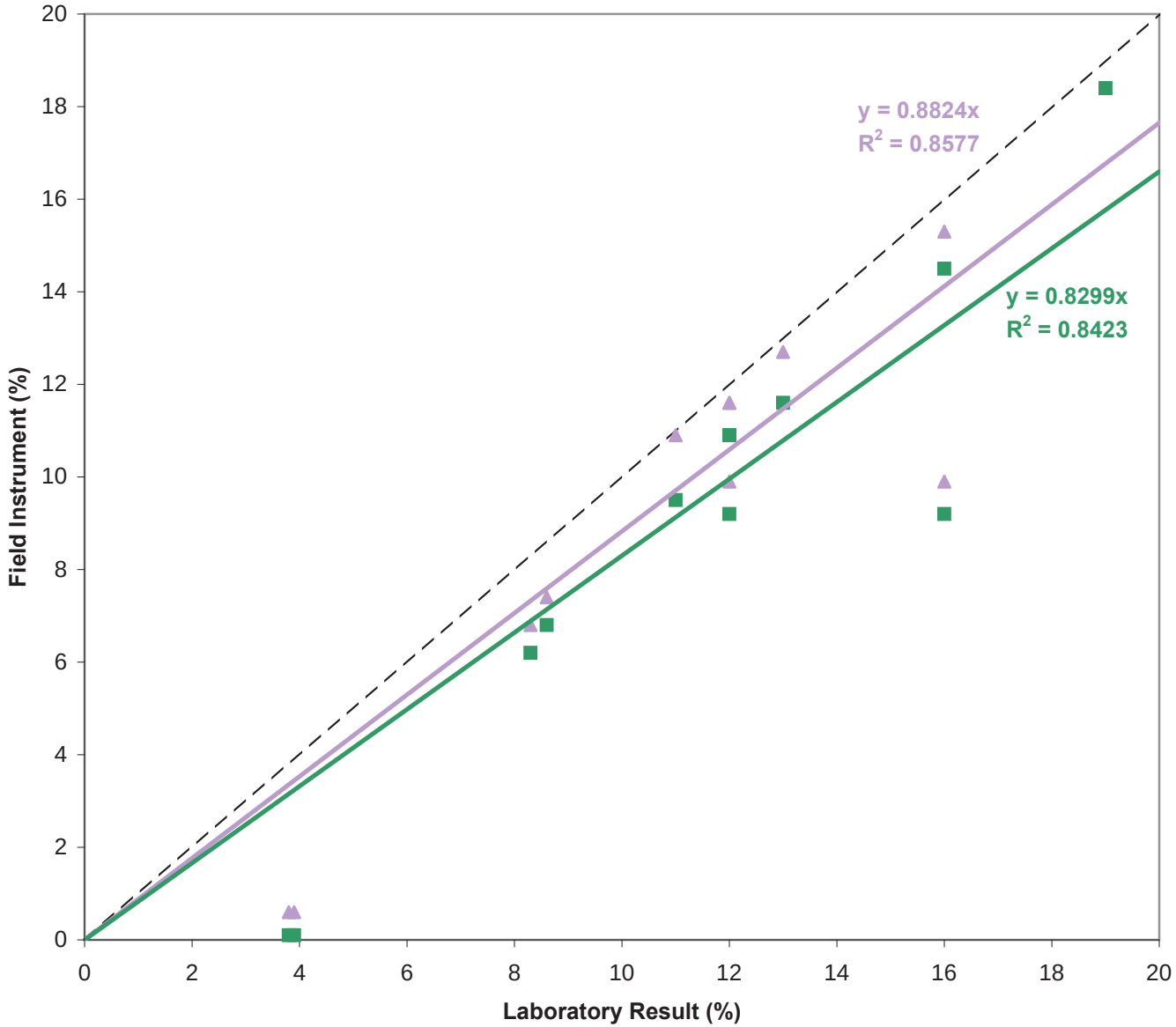
0 125 250 500 Feet

FIGURE 2
CONFIRMATION SAMPLING LOCATIONS

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\EVALUATIONS\BSVE\MAPFILES\SAMPLING\FIGURE2_CONFIRMATIONSAMPLING.MXD TWONG2 10/2/2009 12:41:40



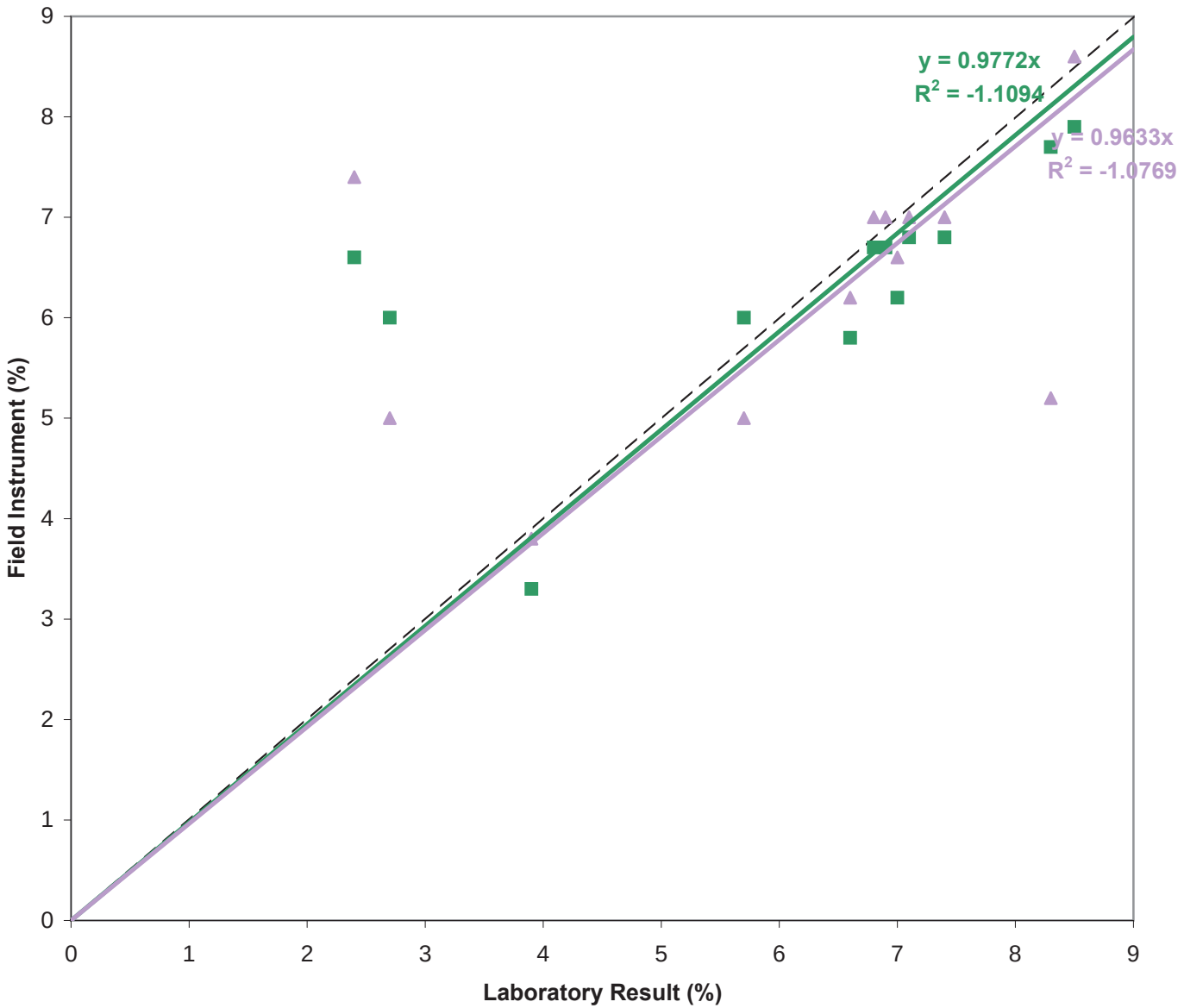
LEGEND:

- ▲ RKI Eagle
- ■ GEM 2000
- – – – 1:1 Ratio

FIGURE 3
FIELD INSTRUMENT READINGS
VS. LABORATORY RESULTS FOR OXYGEN
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

ES082009001PHX_HW 34th Street\Figure 4_FIRvsLR_Oxygen.ai (08/09)



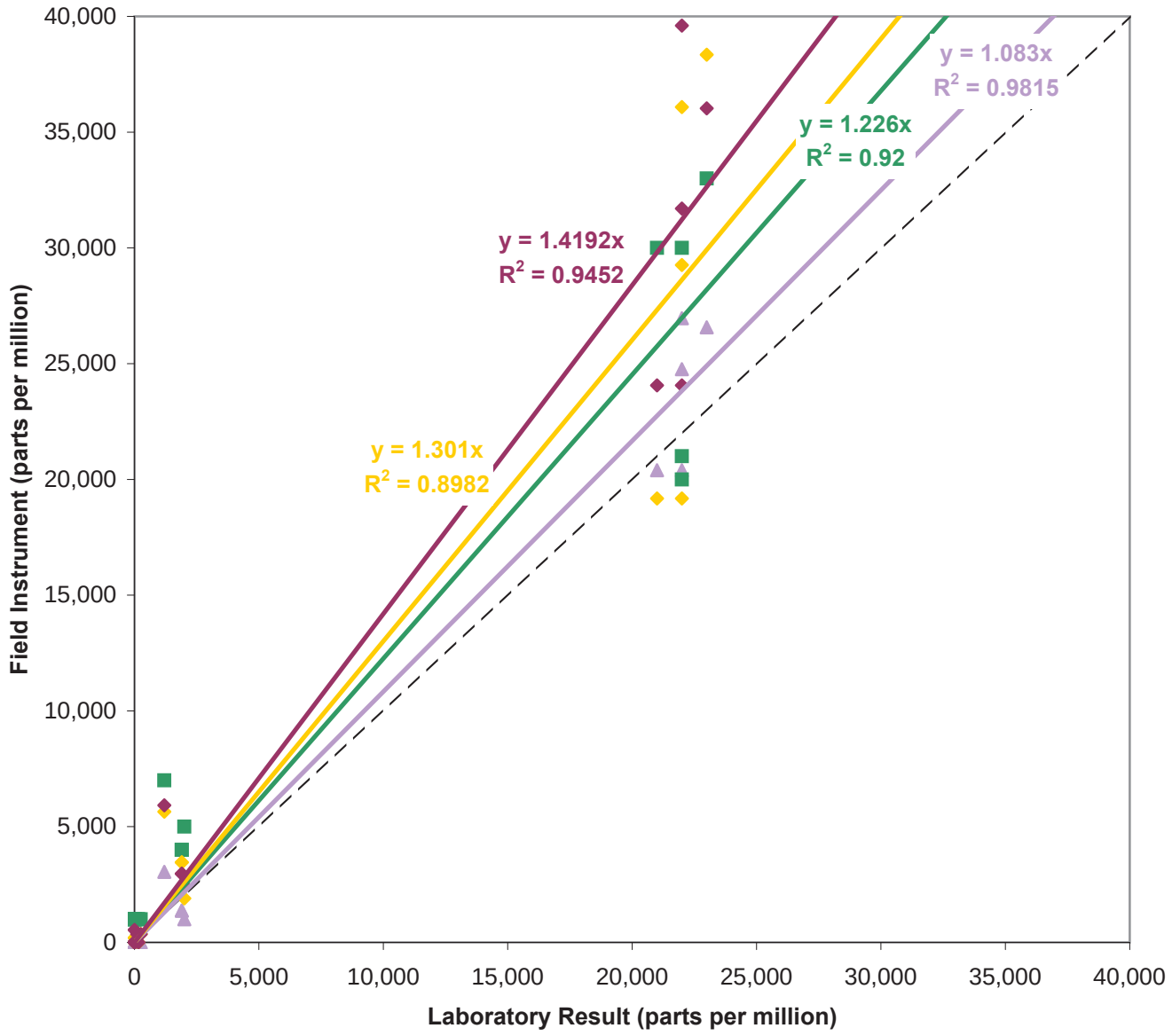
LEGEND:

- ▲ RKI Eagle
- ■ GEM 2000
- – – – 1:1 Ratio

FIGURE 4
FIELD INSTRUMENT READINGS
VS. LABORATORY RESULTS FOR CARBON DIOXIDE
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

ES082009001PHX_HW 34th Street\Figure 6_FIRvsLR_CO2.ai (08/09)



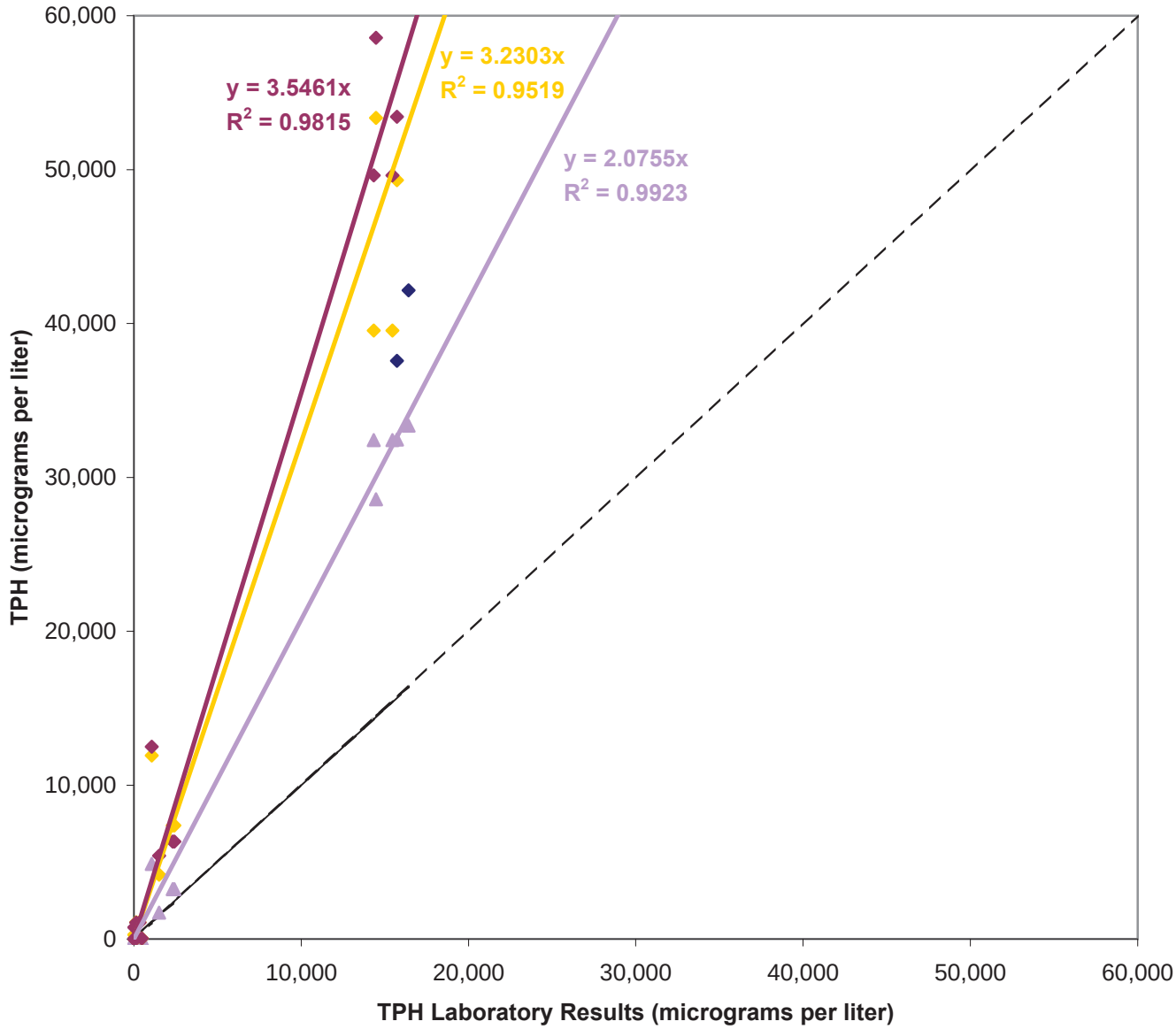
LEGEND:

- RKI Eagle
- GEM 2000
- FID-1
- FID-2
- 1:1 Ratio

FIGURE 5
FIELD INSTRUMENT READINGS
VS. LABORATORY RESULTS FOR METHANE
(WITH RESPONSE FACTOR APPLIED)
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

ES082009001PHX_HW 34th Street\Figure 10_FIRvsLR_Methane_wRFA.ai (08/09)



LEGEND:

- RKI Eagle
- FID-1
- FID-2
- TPH (BTU Calculated Values)
- 1:1 Ratio

FIGURE 6
FIELD INSTRUMENT READINGS AND BTU CALCULATED RESULTS VS. LABORATORY RESULTS FOR TOTAL PETROLEUM HYDROCARBONS

Honeywell 34th Street Facility
Phoenix, Arizona

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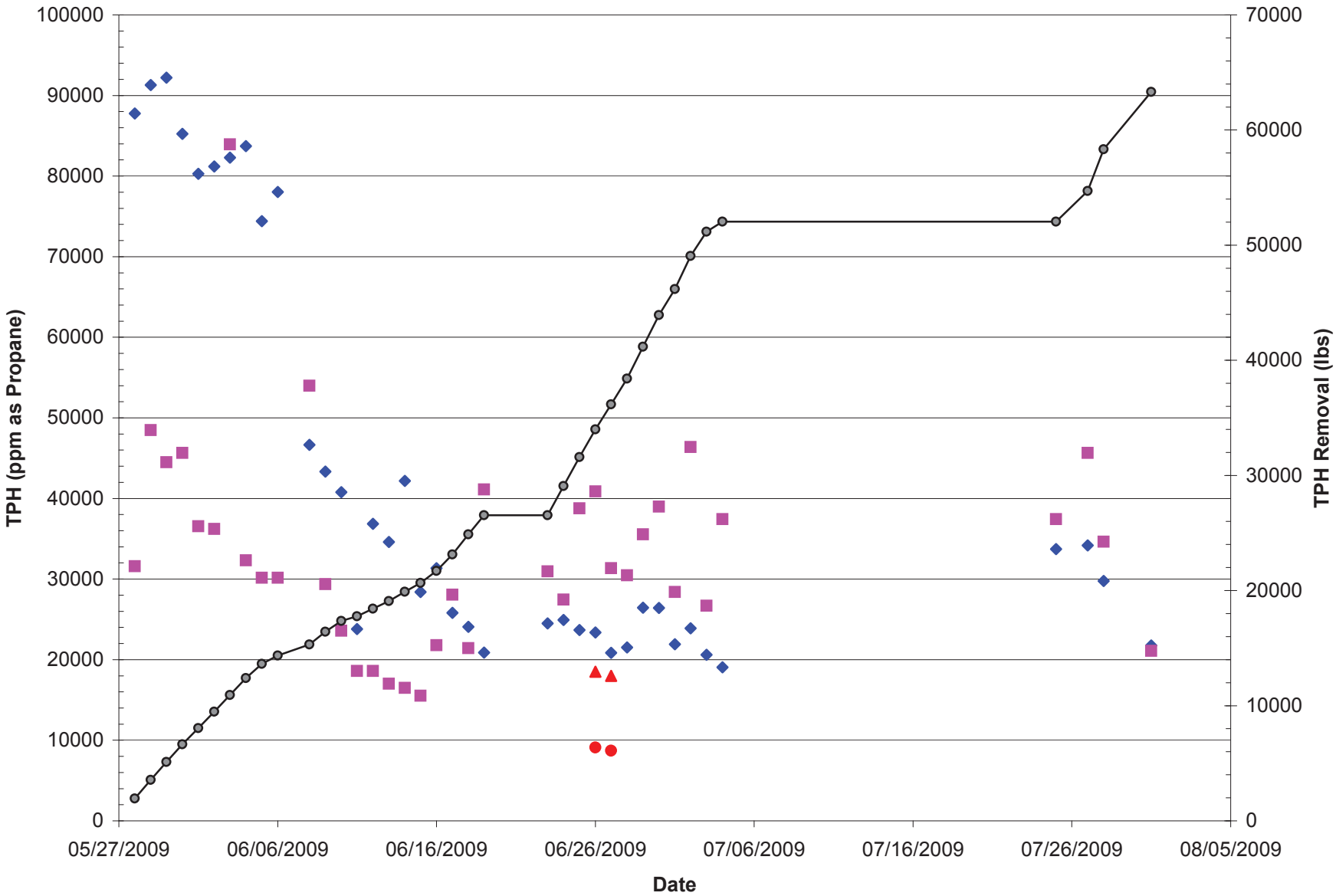
ES082009001PHX_HW 34th Street\Figure 6_FIRvsLR_TotPetHydro.ai (10/09)



NOTE:

- BTU Calculation
- FID Readings
- RKI Eagle Readings
- Lab Analytical Results
- Mass Removal Based on BTU Consumption

FIGURE 7

TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS USING BTU CALCULATIONS COMPARED TO FIELD READINGS AND LABORATORY RESULTS WITH ESTIMATED MASS REMOVAL BASED ON BTU CONSUMPTION

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

ES082009001PHX_HW 34th Street/Figure 7_TPH Estimation_rev1.ai (10/09)

Attachment 1

10 Technical Specifications

10.1 Physical

Weight	4.4 lbs.
Size	L 2.48” x W 7.48’’ x D 9.92”.
Case material	Anti-static ABS.
Keys	Membrane panel.
Display	Liquid Crystal Display 40 x 16 characters. Fiber optic woven backlight for low light conditions.
Filters	User replaceable integral fiber filter at inlet port and external PTFE water trap filter.

10.2 General

Certifications	UL Certified to Class 1, Zone 1, AEx Ib d IIa T4
Temperature measurement	With optional probe 14°F to 167°F.
Temperature accuracy	±0.4ºF (± probe accuracy).
Visual and audible alarm	User selectable CO_2, CH_4 and O_2 Min/Max levels via LSGAM CS software.
Communications	RS232 protocol via download lead with variable baud rate.
Relative pressure	±250 mbar from calibration pressure

10.3 Power supply

Battery type	Rechargeable Nickel Metal Hydride battery pack containing six 4AH cells. **Not user replaceable**. Lithium Manganese battery for data retention.
Battery life	Typical use 10 hours from fully charged condition.
Battery charger	Separate intelligent 2A battery charger powered from AC voltage supply (110-230V).
Charge time	Approximately 2 hours from complete discharge.
Alternative power	Can be powered externally for fixed-in-place applications only. Contact LANDTEC for further information.
Battery lifetime	Up to 1,000 charge/discharge cycles.

10.4 Gas Ranges

Detection principle	CO_2 and CH_4 by dual wavelength infrared cell with reference channel. O_2 (and CO & H_2S in Plus) by internal electrochemical cell.
Oxygen cell lifetime	Approximately 18 months in air.
Typical Accuracy 0 - Full Scale	**Gas** — **0-5% volume** — **5-15% volume** — **15%-FS** **CH_4** — ±0.3% — ±1% — ±3% (100%) **CO_2** — ±0.3% — ±1% — ±3% (60%) **O_2** — ±1% — ±1% — ±1% (21%) **CO & H_2S in Plus Instruments** ±10%FS from 0-Full Scale
Response time, T90	CH_4 ≤20 seconds CO_2 ≤20 seconds O_2 ≤20 seconds

Range	CH_4 0-70% to specification, 0-100% reading. CO_2 0-40% to specification, 0-100% reading. O_2 0-25% CO (in Plus Instruments) 0-2000ppm H_2S (in Plus Instruments) 0-500ppm

10.5 Pump

Typical flow	300 cc/min.
Flow fail point	50 cc/min approximately.
Flow with 200 mbar vacuum	250 cc/min approximately.
Vacuum	70 inches H_20.

10.6 Operating Conditions

Operating temp range	32°F to 104°F.
Relative humidity	0-95% non-condensing.
Atmospheric pressure range	700-1200 mbar. Displayed in Inches of Mercury (5.9 – 35.4“Hg). Not corrected for sea level.
Atmospheric pressure accuracy	±5 mbar approximately.
Case seal	IP65.

10.7 Optional Gas Pods

Typical Accuracy (Subject to User calibration).	**Gas** **0-Full Scale** CO ±10% FS H_2S ±10% FS SO_2 ±10% FS H_2 ±10% FS HCN ±10% FS
Response time, T90	CO ≤60 seconds H_2S ≤60 seconds SO_2 ≤60 seconds H_2 ≤60 seconds HCN ≤60 seconds
Range	CO 0-500ppm H_2S 0-50 or 0-200ppm SO_2 0-20 or 0-100ppm H_2 0-1000ppm HCN 0-100ppm

Attachment 2

Specifications

Table 1 lists physical and environmental specifications for the Eagle. Table 2 lists specifications for the Eagle's standard sensors.

Table 1: Eagle Specifications

Target Gases[1]	Combustible gas; Oxygen (O_2), Carbon monoxide (CO); Hydrogen sulfide (H_2S)
Case	High-impact polycarbonate-polyester blend
Safety/Regulatory[2]	CSA/NTRL and UL classified intrinsically safe (Class I, Division 1, Groups A, B, C, and D)
Dimensions	10.5 in. x 5.9 in. x 7.0 in. (26.7 cm x 15.0 cm x 17.8 cm)
Weight	5 lbs. (2.25 kg)
Power	Four D-size batteries (alkaline or Ni-Cd)
Continuous Operating Hours	Alkaline: 30 hours (minimum) Ni-Cd: 18 hours (minimum)[3]
Operating Temperature	14°F to 104°F (-10°C to 40°C)
Humidity	0 to 95% (non-condensing)
Standard Accessories	Shoulder strap; alkaline batteries; hydrophobic probe; 5-foot hose
Optional Accessories	Ni-Cd batteries; battery charger (115 VAC); continuous operation adapter (115 VAC or 12 VDC); dilution fitting (1:1 or 3:1); remote alarm; data logger

1 Appendices C, D, and E describe the Eagle's non-standard sensors.

2 Consult RKI Instruments, Inc., for regulatory classifications of versions other than the standard 4-gas and non-standard toxic gas versions.

3 Based on RKI part number 49-1240RK.

Table 2 lists specifications for the Eagle's standard sensors. Your Eagle model may not include all of the sensors listed below. The alarm settings are user-adjustable (see "Updating the Alarm Point Settings" on page 32.)

Table 2: Standard Sensor Specifications

	Combustible Gas (%LEL[1])	Combustible Gas (PPM[2])	Oxygen	Hydrogen Sulfide	Carbon Monoxide
Range	0 to 100% LEL	Depends on target gas[4]	0 to 40% O_2	0 to 100 ppm	0 to 500 ppm
Alarm 1	10% LEL	5000 ppm	19.5% O_2 (decreasing)	10.0 ppm	25 ppm
Alarm 2	50% LEL	25,000 ppm	23.5% O_2 (increasing)	30.0 ppm	50 ppm
TWA Alarm	N/A	N/A	N/A	10.0 ppm	25 ppm
STEL Alarm	N/A	N/A	N/A	15.0 ppm	400 ppm
Detection Principle	Catalytic combustion	Catalytic combustion	Electro-chemical	Electro-chemical	Electro-chemical
Response Time (to 90%)[5]	30 seconds	30 seconds	30 seconds	30 seconds	30 seconds
Accuracy (of fullscale)	± 5%	± 5%	± 5%	± 5%	± 5%

1 LEL (Lower Explosive Limit)

2 PPM (Parts Per Million)

3 Alarms settings are user adjustable. See "Updating the Alarm Point Settings" on page 32.

4 The PPM range represents the same range as 0 to 100% LEL for that gas. For example, 100% LEL for methane = 5% by volume = 50,000 PPM. Therefore, the PPM range for methane is 0 to 50,000.

5 With the Eagle's standard hose and probe attached.

Attachment 3

FLAME IONIZATION MONITOR

MicroFID

MicroFID

Detectable Compounds

Saturated Hydrocarbons - Methane, Ethane, Propane, n-Hexane

Aromatics - Benzene, Toluene, Naphthalene

Unsaturated Hydrocarbons -Acetylene, Ethylene, 1,3-Butadiene

Chlorinated Hydrocarbons- Vinyl Chloride, Chloroform, Trichloroethylene, Methylene Chloride

Ketones - Acetone, Methyl Ethyl Ketone, Methyl Isobutyl Ketone

Alcohols - Methanol, Ethanol, Isopropanol, n-Butanol

Please note: This list provides examples of the types of compounds detectable by the MicroFID. Please contact Photovac Technical Support for details on specific compound detection.

For further information on Photovac products, or to arrange a product demonstration, please contact a Photovac representative near you, email us at sales@photovac.com or contact Photovac, Inc.

Specifications

Size
43.4 cm (17.1") long, 9.8 cm (3.85") wide, 18.8 cm (7.4") high

Weight
8.1 lb (3.7 kg)

Keypad
16-key, fixed function

Display
2-line, 16-character LCD with alphanumeric readout

Hydrogen Cylinder Discharge
Greater than 12 hours

Hydrogen Cylinder Capacity
9.2 liters

Battery Capacity
15 hours (snap-on replacement)

Serial Output
RS – 232, 1200-19200 baud with no parity, for tabular and graphic printouts and connection to a Windows® compatible computer.

Audio Output
On Alarm, LoBatt and NoFlm

Response Time
Less then 3 seconds

Operating Temperature Range
41°F to 105°F (5°C to 45°C)

Operating Humidity
0-100% Relative Humidity (non-condensing)

Operating Concentration Range
0.5 PPM to 2000 PPM methane equivalent (Low Range)
10 PPM to 50,000 PPM methane equivalent (High Range)

Minimum Detection Limit
0.5 PPM methane

Accuracy
Methane (after calibration with zero air and 500 PPM methane gas): within ± 0.5 PPM or ± 10% of actual methane concentration (0.5 PPM to 2000 PPM range).

Intrinsic Safety
Class I, Division 1, Groups A, B, C, & D
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Attachment 4

Thermox Energy Balance for the Estimation of TPH Concentration in the BSVE Inlet Stream, BSVE System, Honeywell 34th Street Facility, Phoenix, Arizona

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PREPARED BY: CH2M HILL

COPIES:

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PROJECT NUMBER: 371995.ES.61.12

1.0 Introduction

The purpose of this technical memorandum is to present the results of the heat transfer calculations to determine the total petroleum hydrocarbons (TPH)concentrations at the Honeywell International Inc. (Honeywell) biologically-enhanced soil-vapor extraction (BSVE) system inlet at the Honeywell 34th Street Aerospace Engines Product Center (Honeywell facility or the Facility). The objective of the calculations is to provide an additional estimate of the TPH concentrations at the BSVE inlet, based on the natural gas flow into the thermal oxidizer (Thermox) unit.

2.0 Theoretical Basis

The estimated TPH concentrations are based on the combustion energy obtained from burning the contaminants within the extracted soil vapor. An energy balance must be performed around the Thermox unit so this value can be calculated. For this balance, various inputs and outputs of energy were considered.

2.1 Energy Inputs

Based on the design of the BSVE Thermox unit, it uses two different inputs of energy. These two energy inputs are from combustion of natural gas, and the combustion of TPH found in the soil vapor stream. For the calculation of the total energy input obtained from natural gas, it was assumed that approximately 1,000 British Thermal Units (BTUs) are found in each standard cubic foot (scf) of natural gas. In the case of TPH, because the BTU value is unknown, the BTU value was considered to be similar to that of propane (1471.6 BTU/scf), as propane is the standard gas used to calibrate the field monitoring equipment. As a result, the energy input related to the TPH value was estimated based on the heat balance.

2.2 Energy Outputs

Two main energy outputs used in the heat balance were based on the configuration of the BSVE Thermox unit, and the different processes occurring within it. These two energy outputs are the heat loss of the Thermox unit to the environment, and the heat adsorbed by the gases to increase the temperature from ambient to the temperature set point in the Thermox unit.

Heat loss to the environment is difficult to measure and depends on the ambient temperature at the time of measurement. For the purpose of these estimations, the heat loss to the environment was approximated by determining the amount of heat required to keep the system on stand by, meaning without extracting soil vapor. Based on these estimations, the heat loss to the environment was estimated to be between 400,000 and 600,000 BTU/hr.

The heat adsorbed by the gases was calculated by estimating the heat capacity of the gas mixture, with an increase in temperature from 90 °F to 1,575 °F. To obtain the heat capacity of the gas mixture, the following formula was used:

$$C_P / R = A + BT + CT^2 + DT^{-2}$$

Where:
C_P = the heat capacity per mole of gas
R = the ideal gas constant
T = temperature (in Kelvin), and
A, **B**, **C**, **D** = gas specific parameters

The total heat is then calculated using the following formula:

$$H = Q \bullet R \bullet \left(A(T_2 - T_1) + \frac{B}{2}\left(T_2^2 - T_1^2\right) + \frac{C}{3}\left(T_2^3 - T_1^3\right) - D\left(\frac{1}{T_2} - \frac{1}{T_1}\right)\right)$$

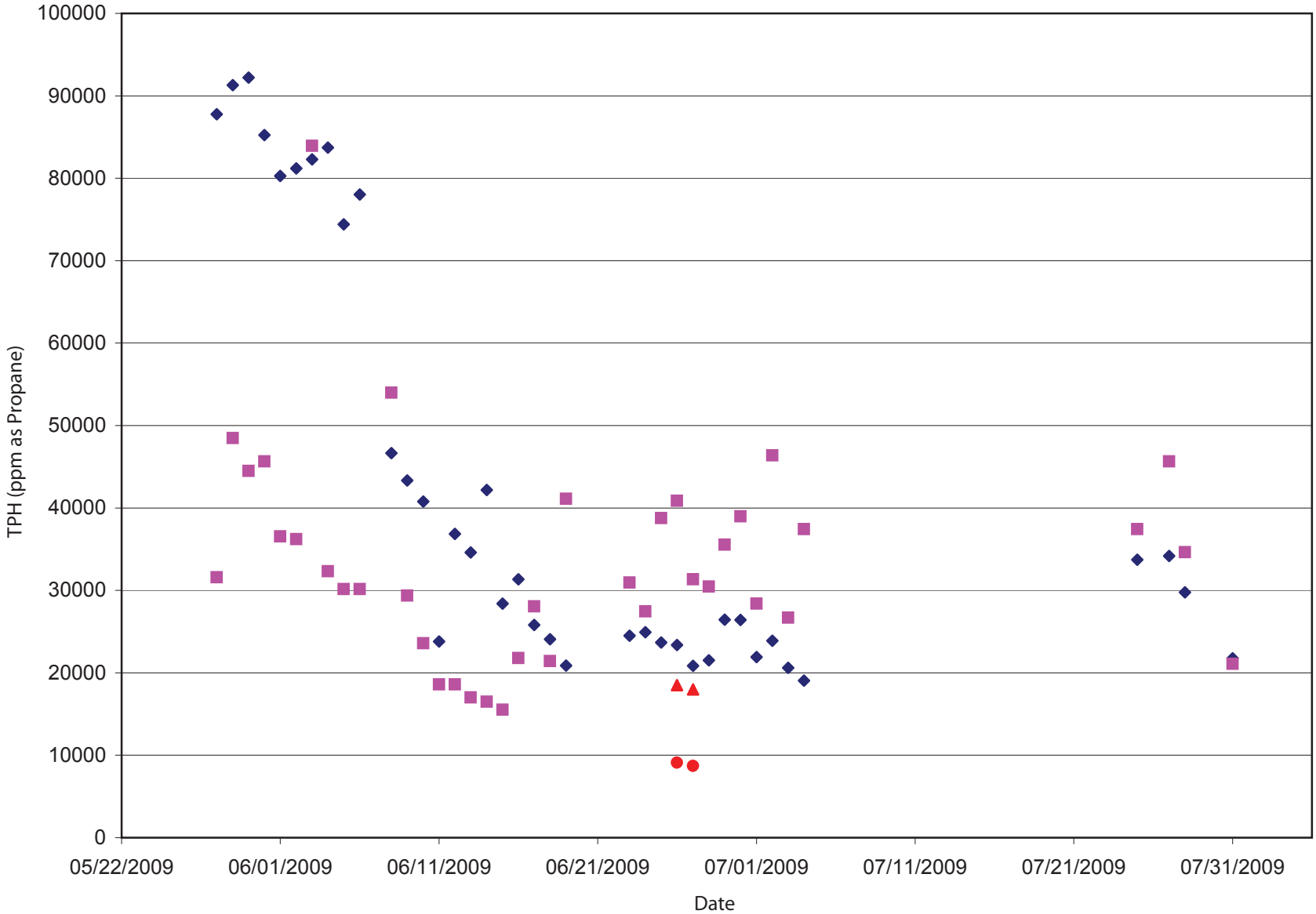
Where:
H = the rate of total heat adsorbed
Q = the mass flow of gas in the Thermox unit, and
T_1 and **T_2** = the initial and final temperature, respectively
All other parameters are the same as in the previous formula

3.0 TPH Estimation

The energy input and output calculations result in a calculated energy balance, where the "energy in" must be equal to the "energy out" due to the laws of conservation. Based on the assumptions and the known quantities, the difference between the "energy in" and the "energy out" is assumed to correspond to the energy obtained from the combustion of TPH in the BSVE inlet stream. This energy value, based on the BTU of propane, is then used to calculate the concentration of TPH as propane in the BSVE stream.

4.0 Discussion of Results

Figure 1A illustrates the calculated TPH concentrations as propane based on the energy balance developed for the Thermox unit. Figure 1A also shows the daily flame ionizing detector (FID) readings and the two RKI Eagle™ readings, and the results of the two laboratory-analyzed samples collected at the BSVE inlet. The two RKI Eagle™ readings were collected in June 2009 during the second quarter soil vapor confirmation sampling event. As shown in the figure, it appears that both the Photovac FID and the RKI Eagle™ agree well with the BTU analysis; however, the RKI Eagle™ data appear to correlate somewhat better with the BTU analysis. The laboratory analysis indicates a significantly lower concentration.



NOTE:

- ◆ BTU Calculation
- ■ FID Readings
- ▲ RKI Eagle Readings
- ● Lab Analytical Results

FIGURE 1A

TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS USING BTU CALCULATIONS COMPARED TO THE FIELD INSTRUMENT READINGS AND LABORATORY RESULTS

Honeywell 34th Street Facility

Phoenix, Arizona

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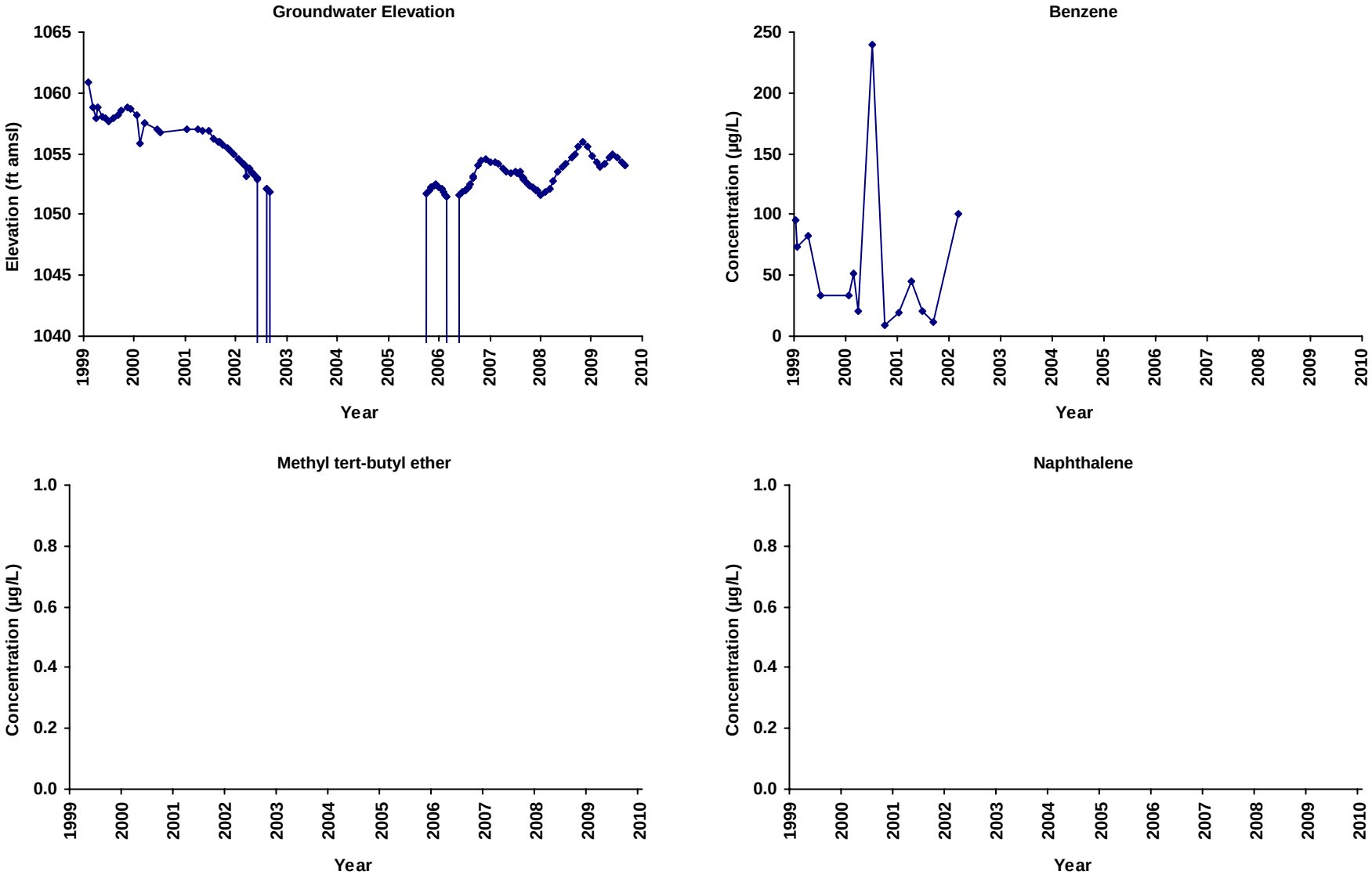
ES082009001PHX_HW 34th Street/Figure 7_TPH Estimation.ai (10/09)

Appendix D
Water Level and Water Quality Hydrographs



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-1
ASE-19A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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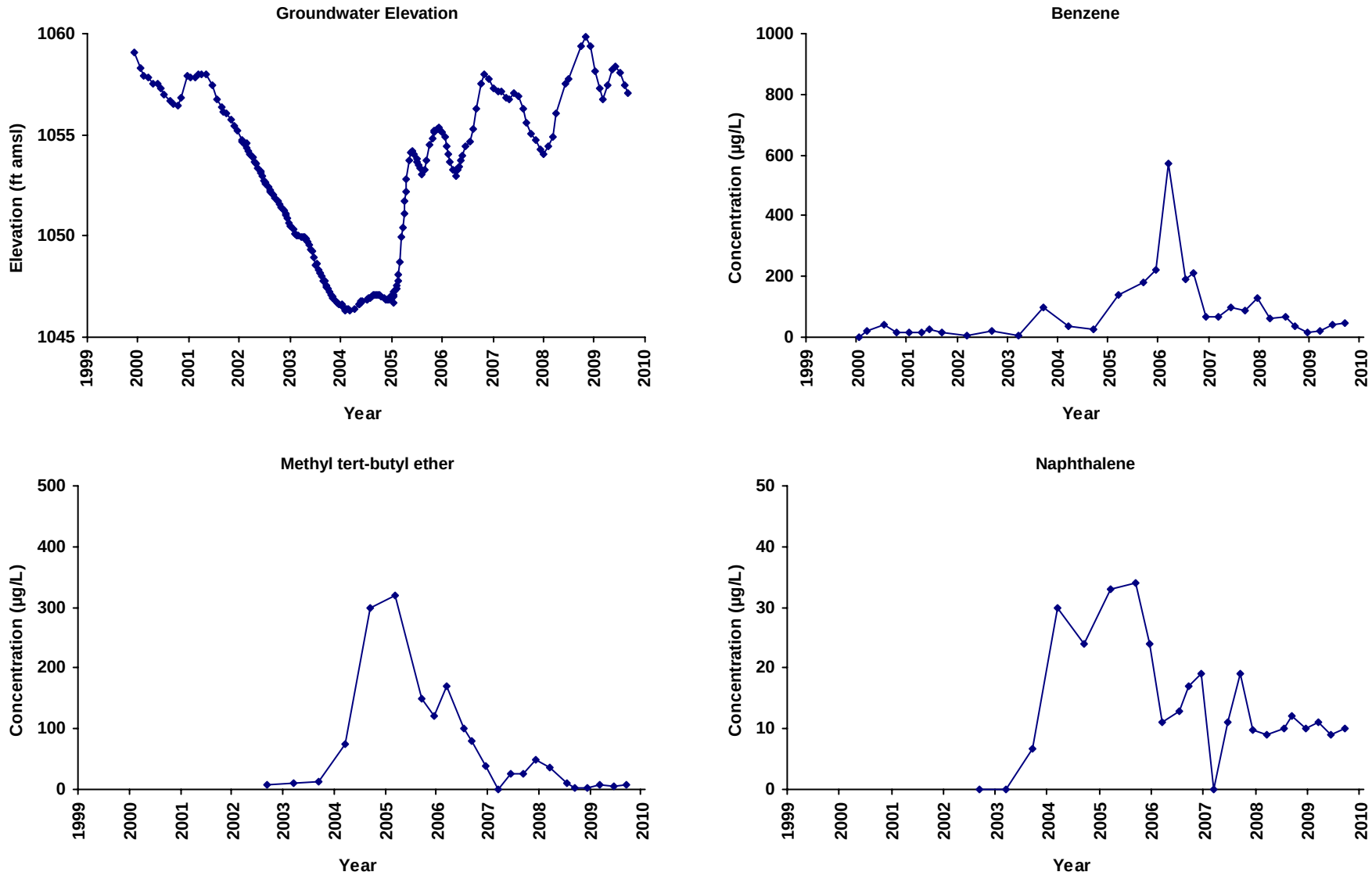

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-2
ASE-37A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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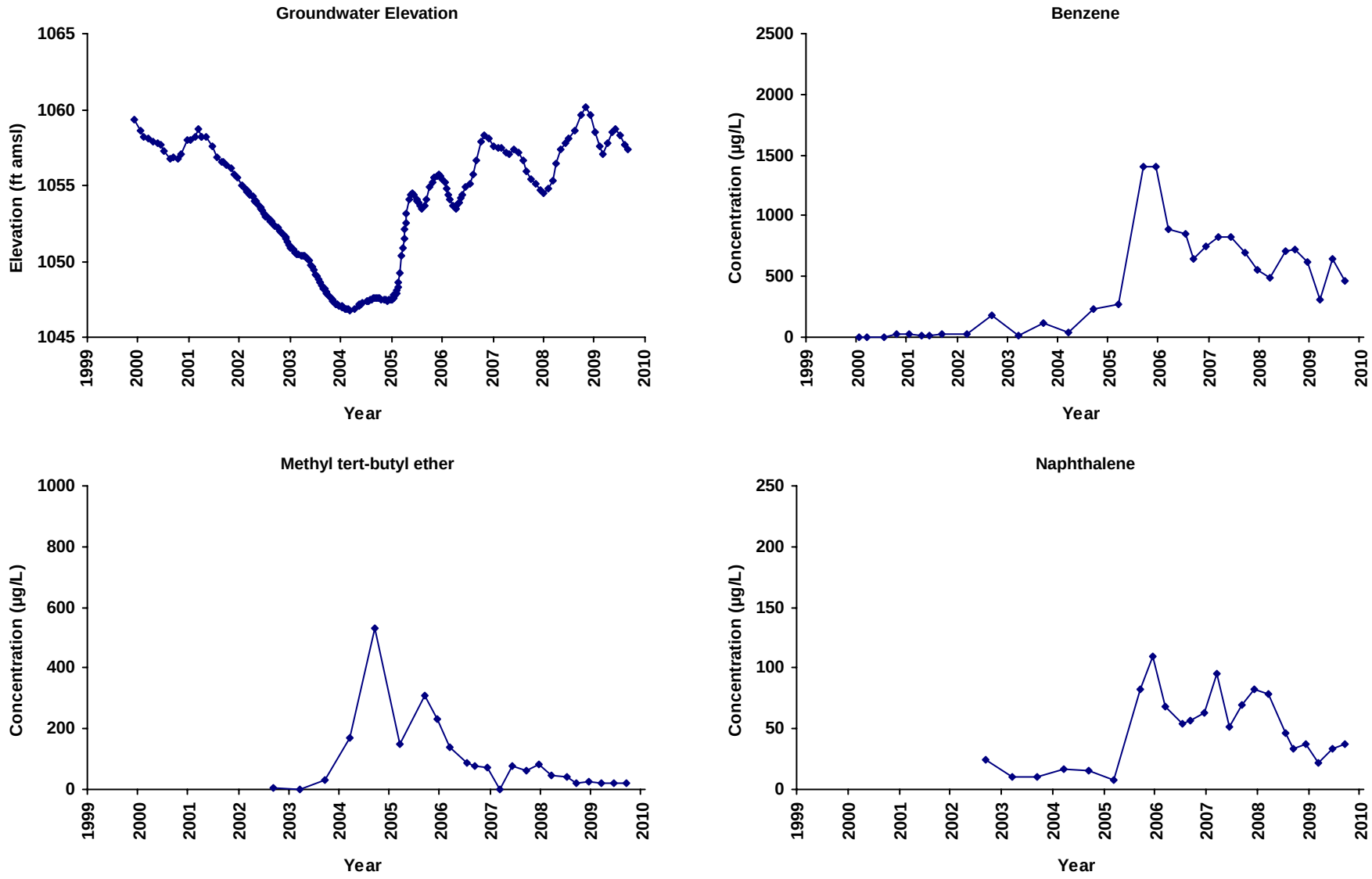

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-3
ASE-38A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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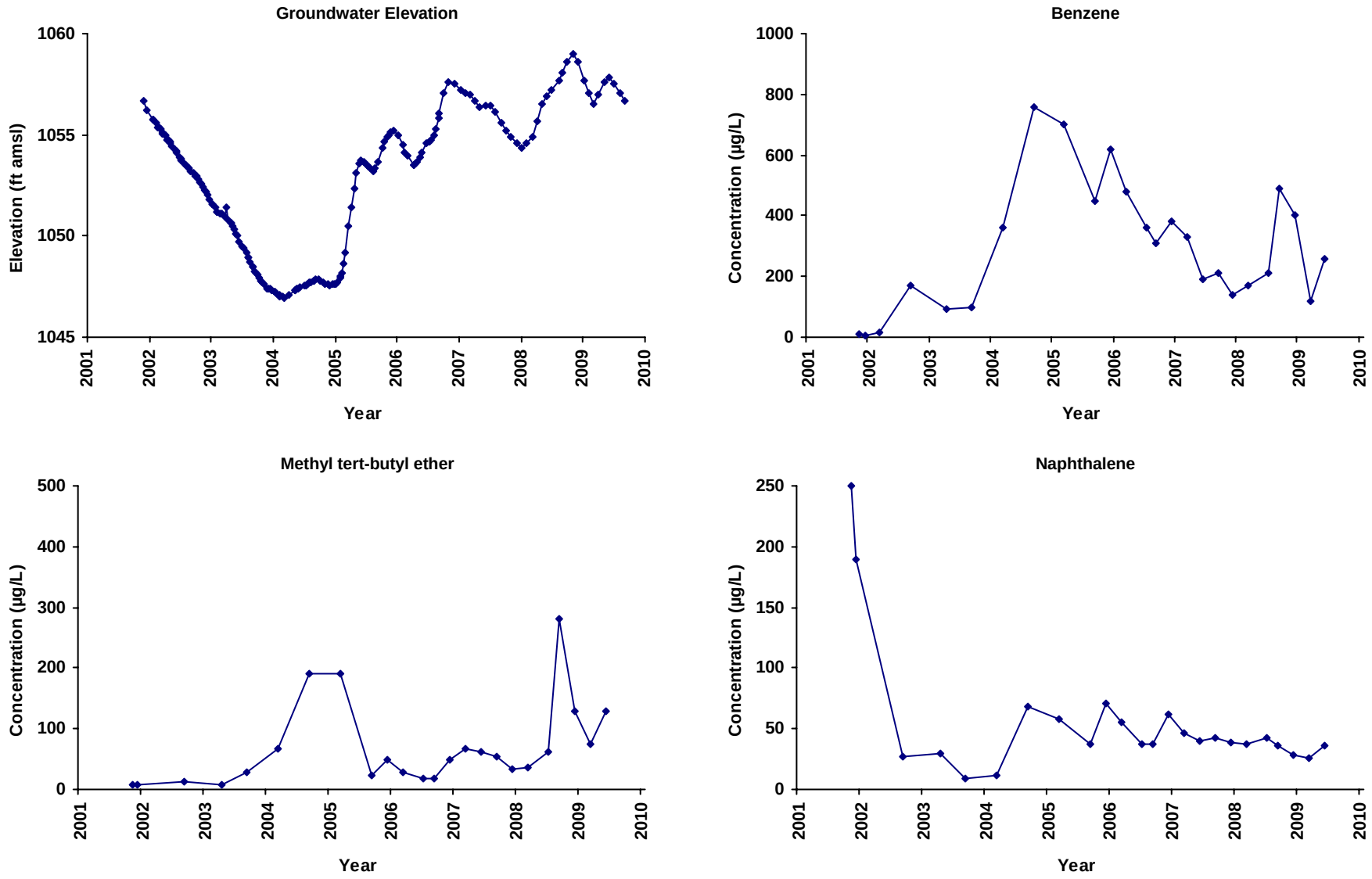

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-4
ASE-52A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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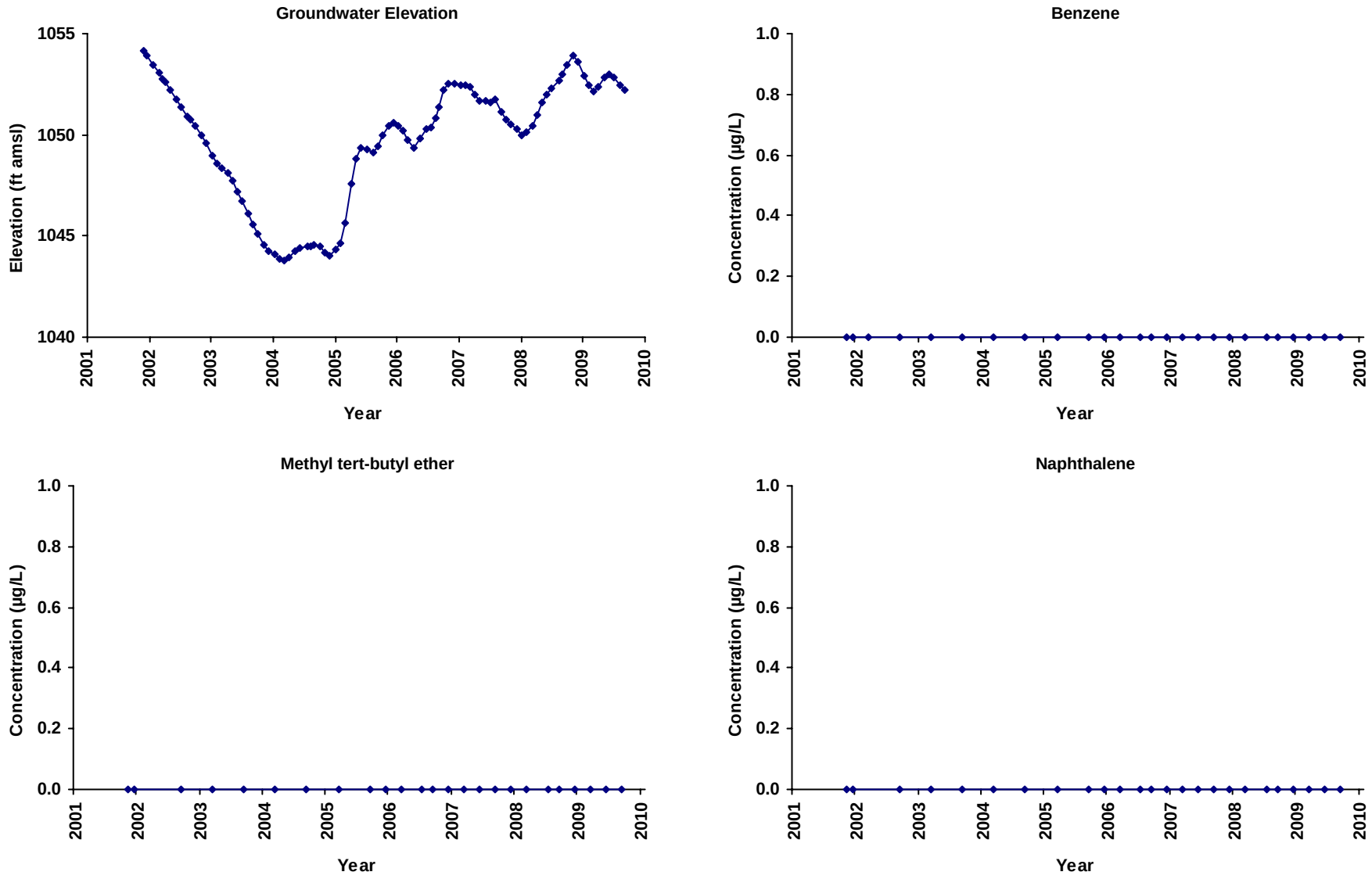

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-5
ASE-54A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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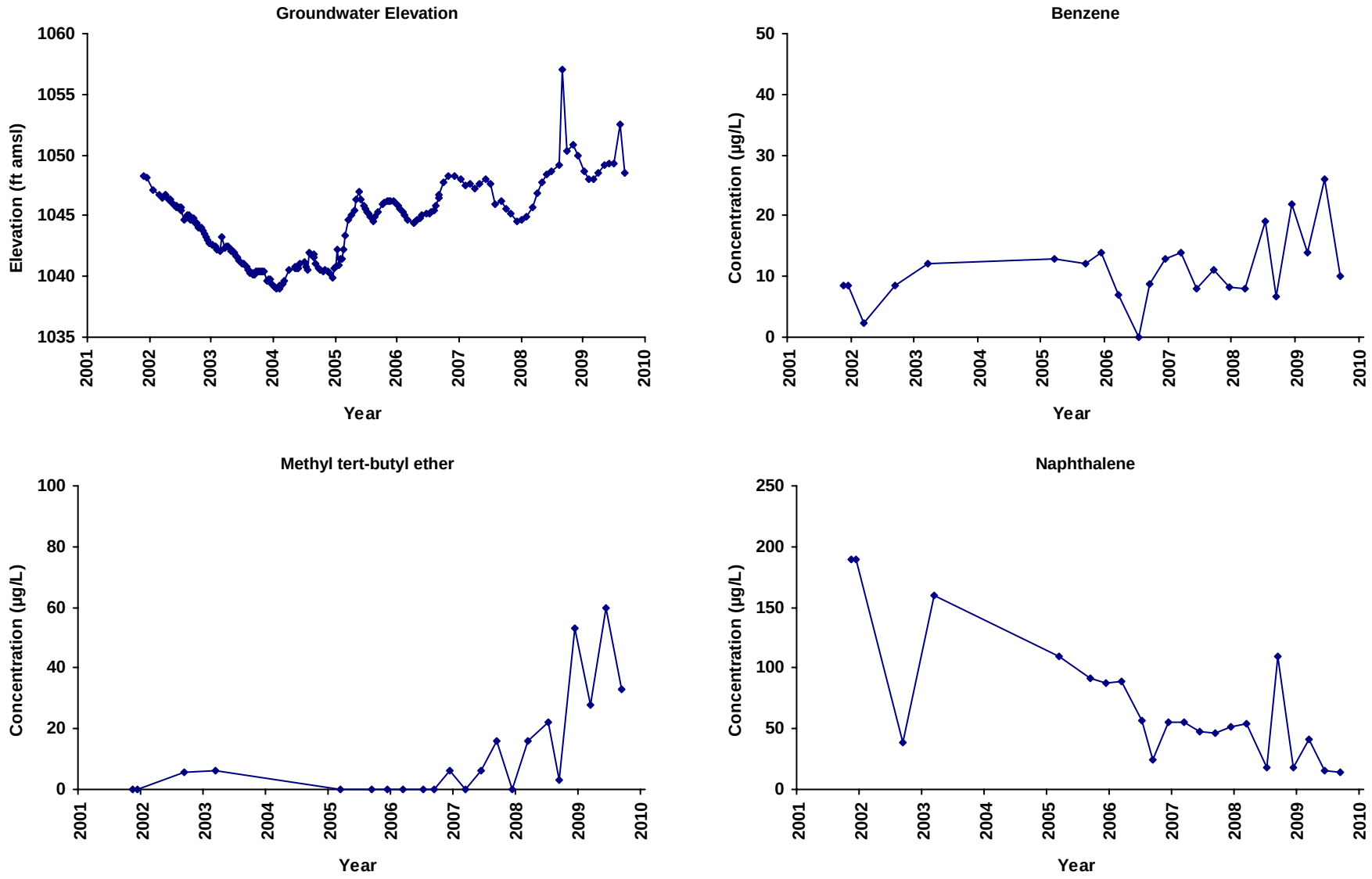

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-6
ASE-55A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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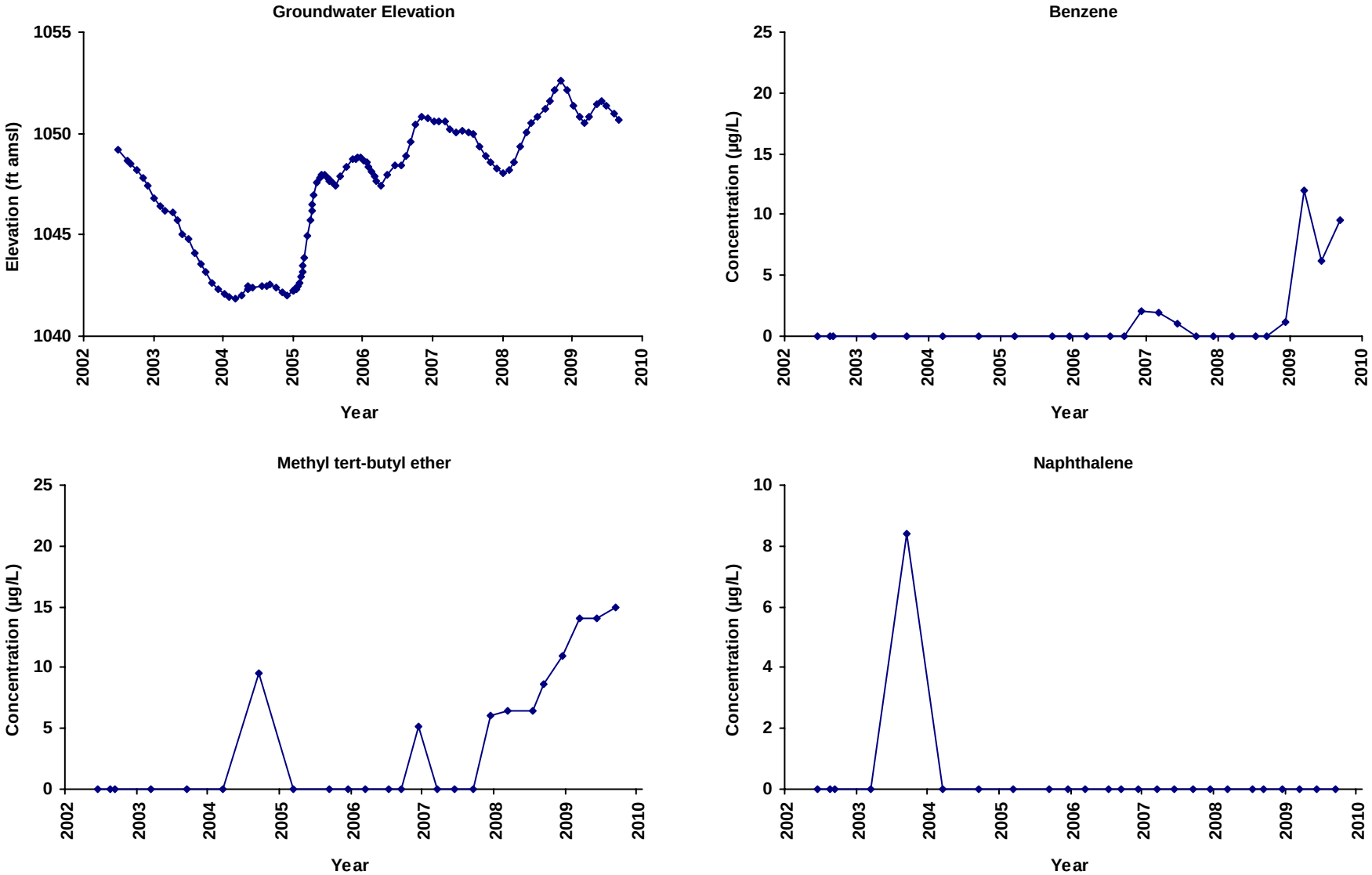

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-7
ASE-58A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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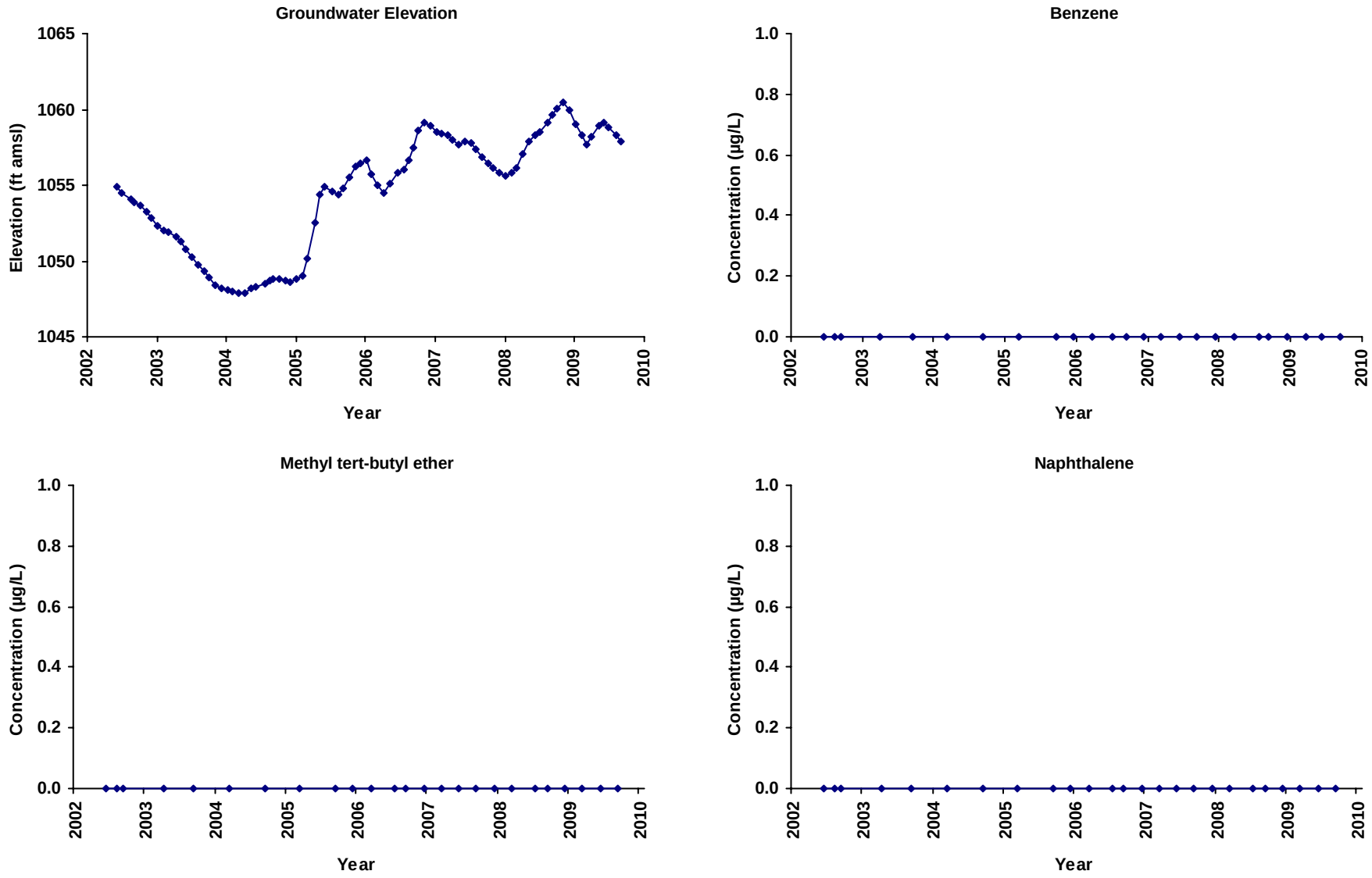

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-8
ASE-60A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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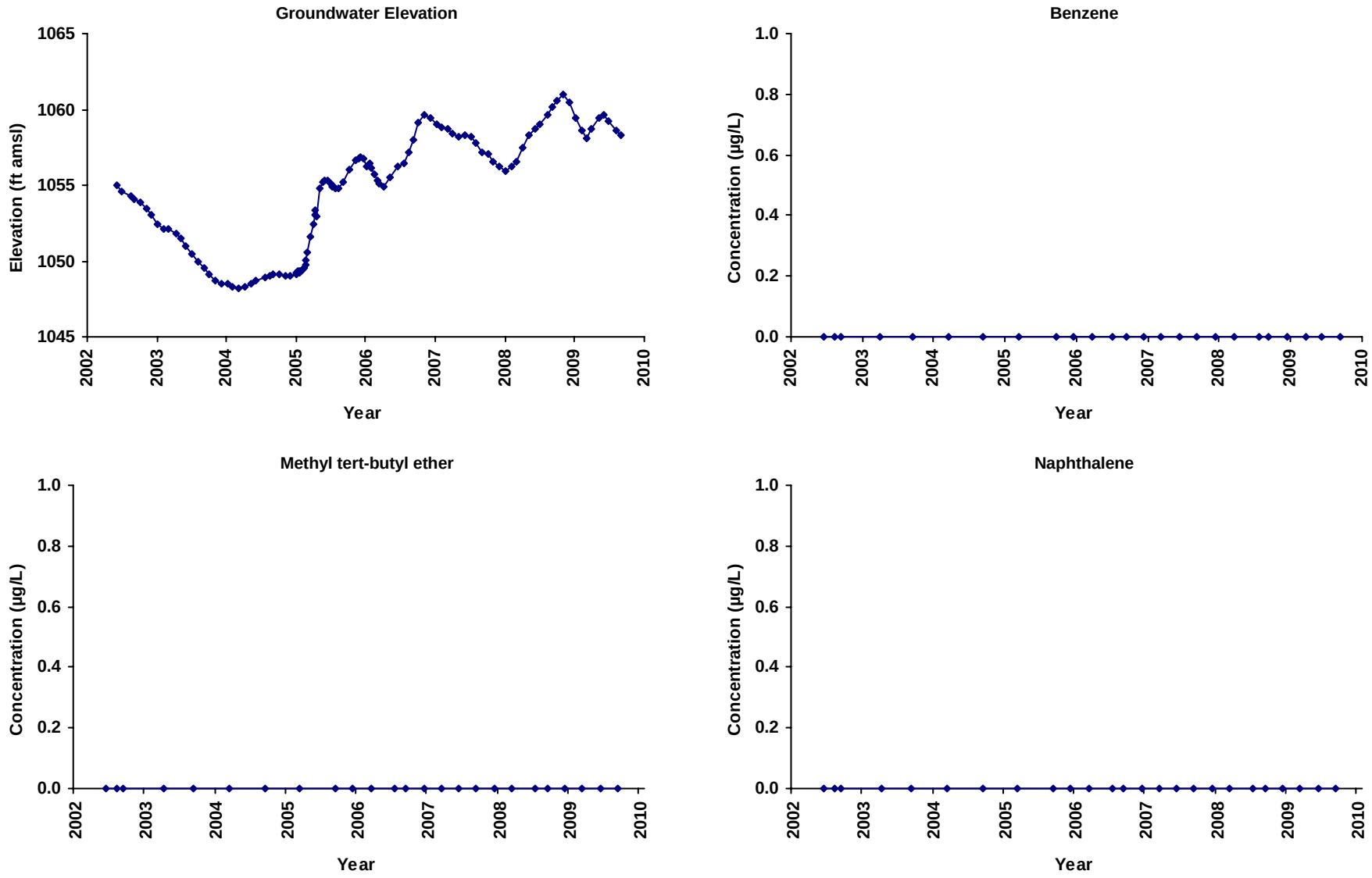

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-9
ASE-61A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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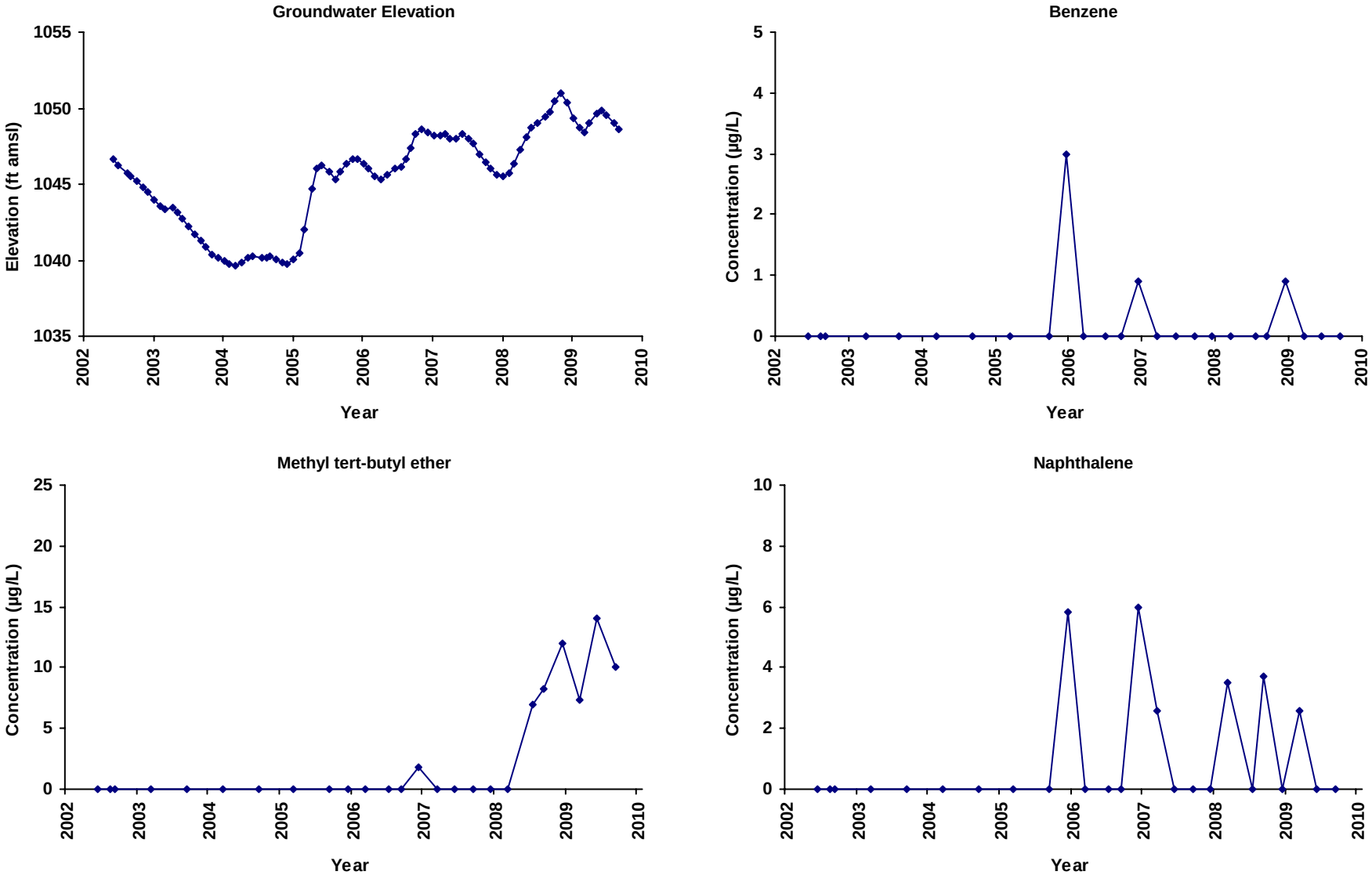

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-10
ASE-62A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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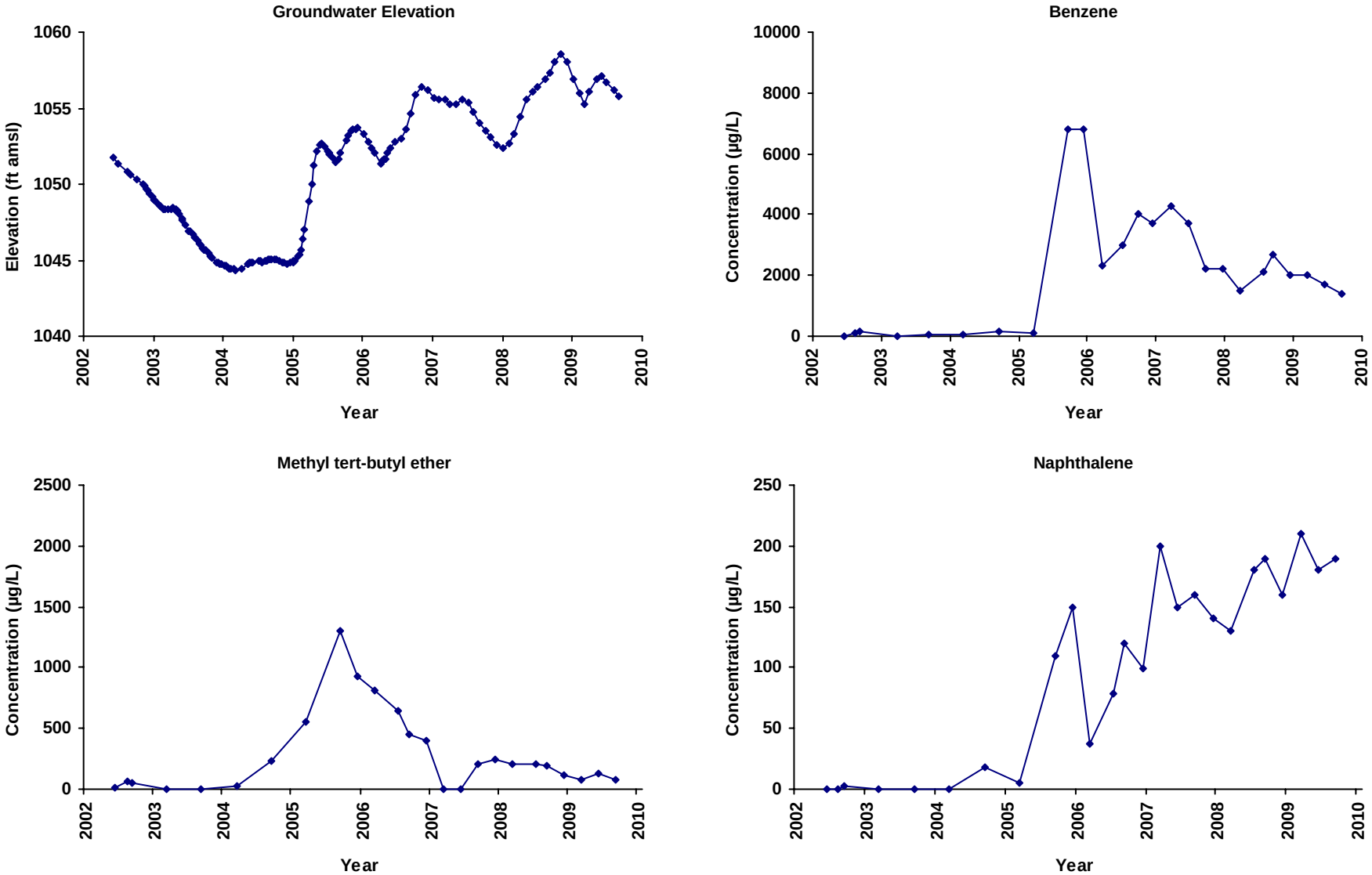

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-11
ASE-63A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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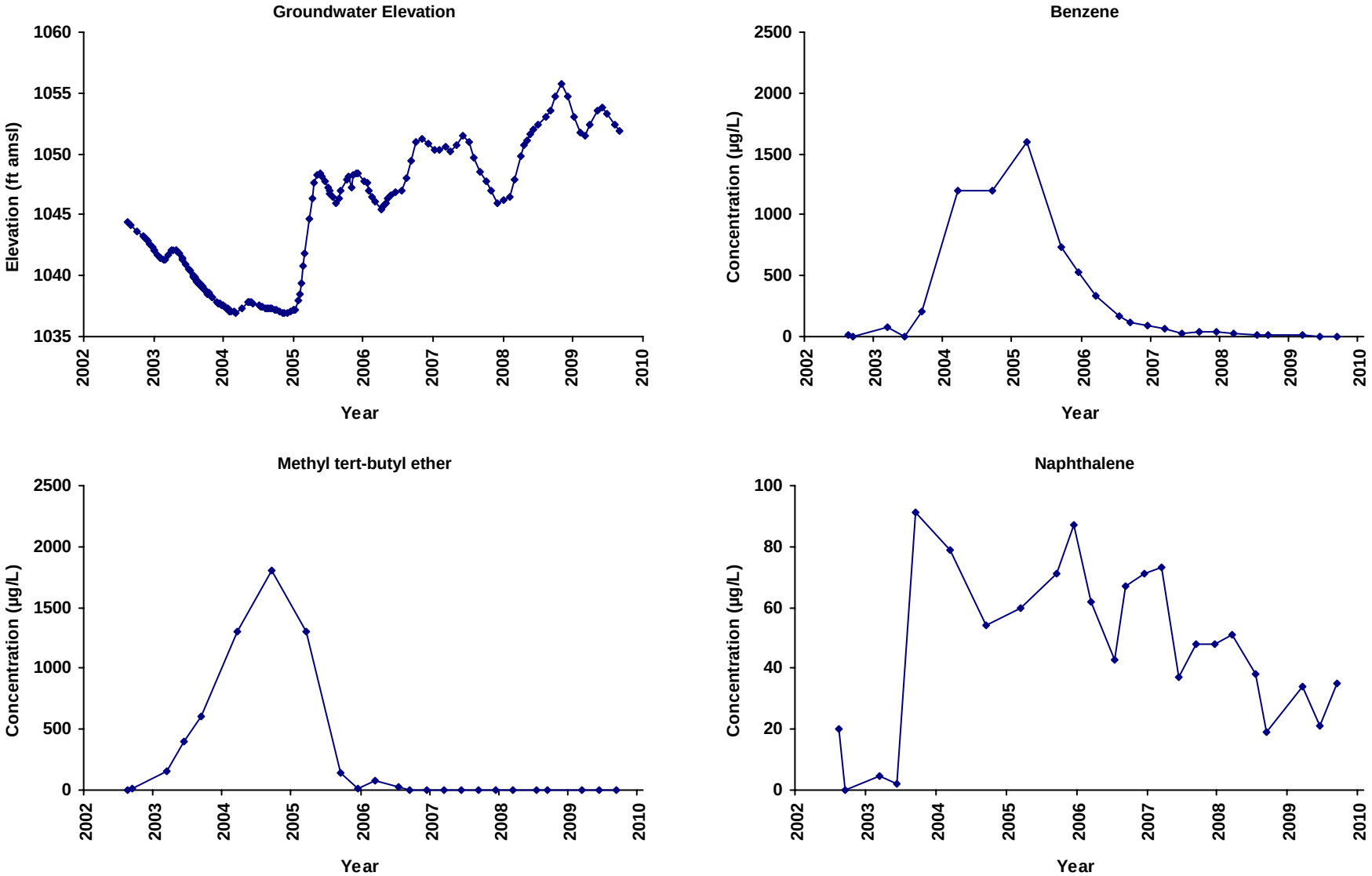

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-12
ASE-64A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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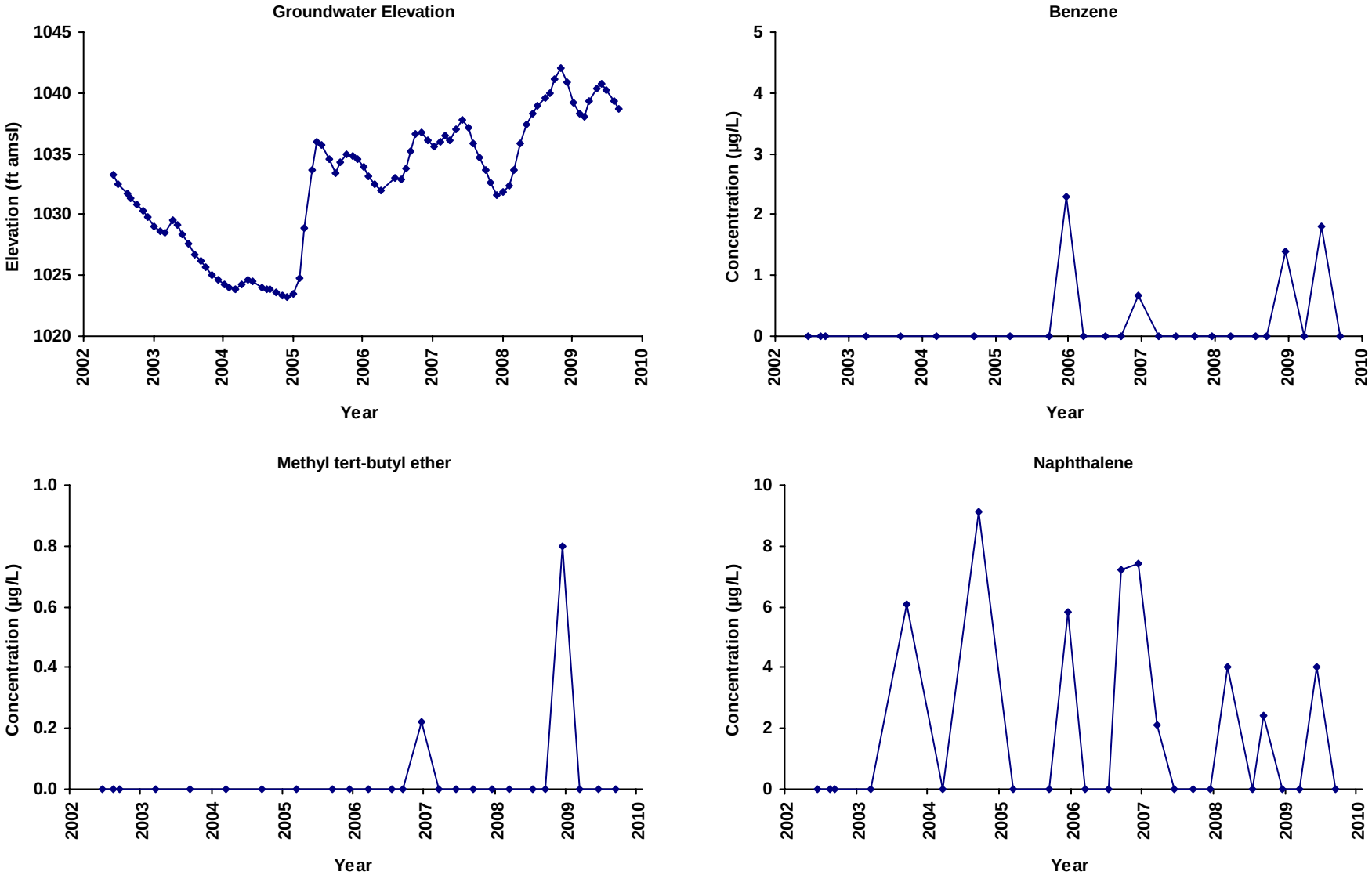

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-13
ASE-65A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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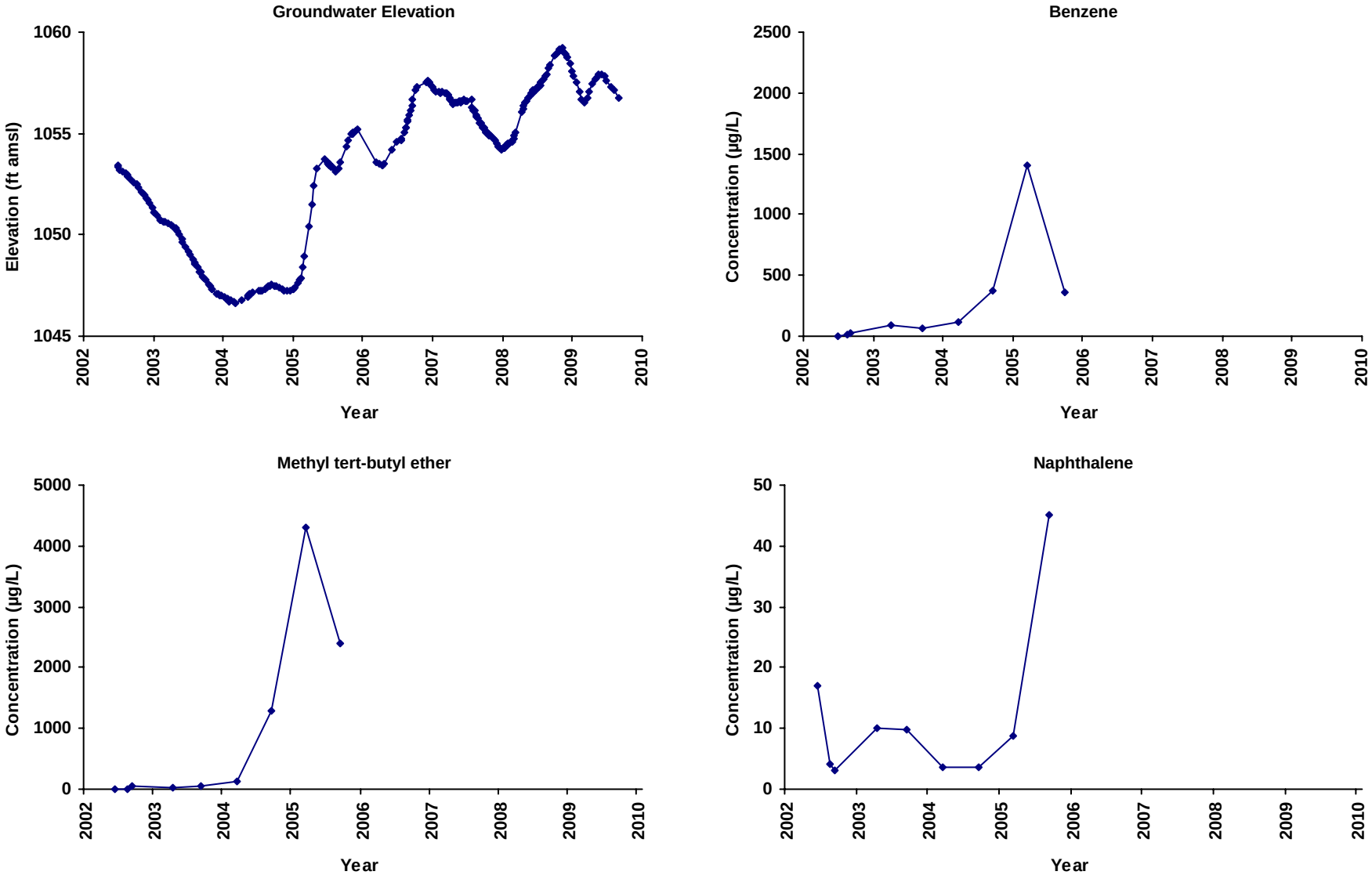

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-14
ASE-67A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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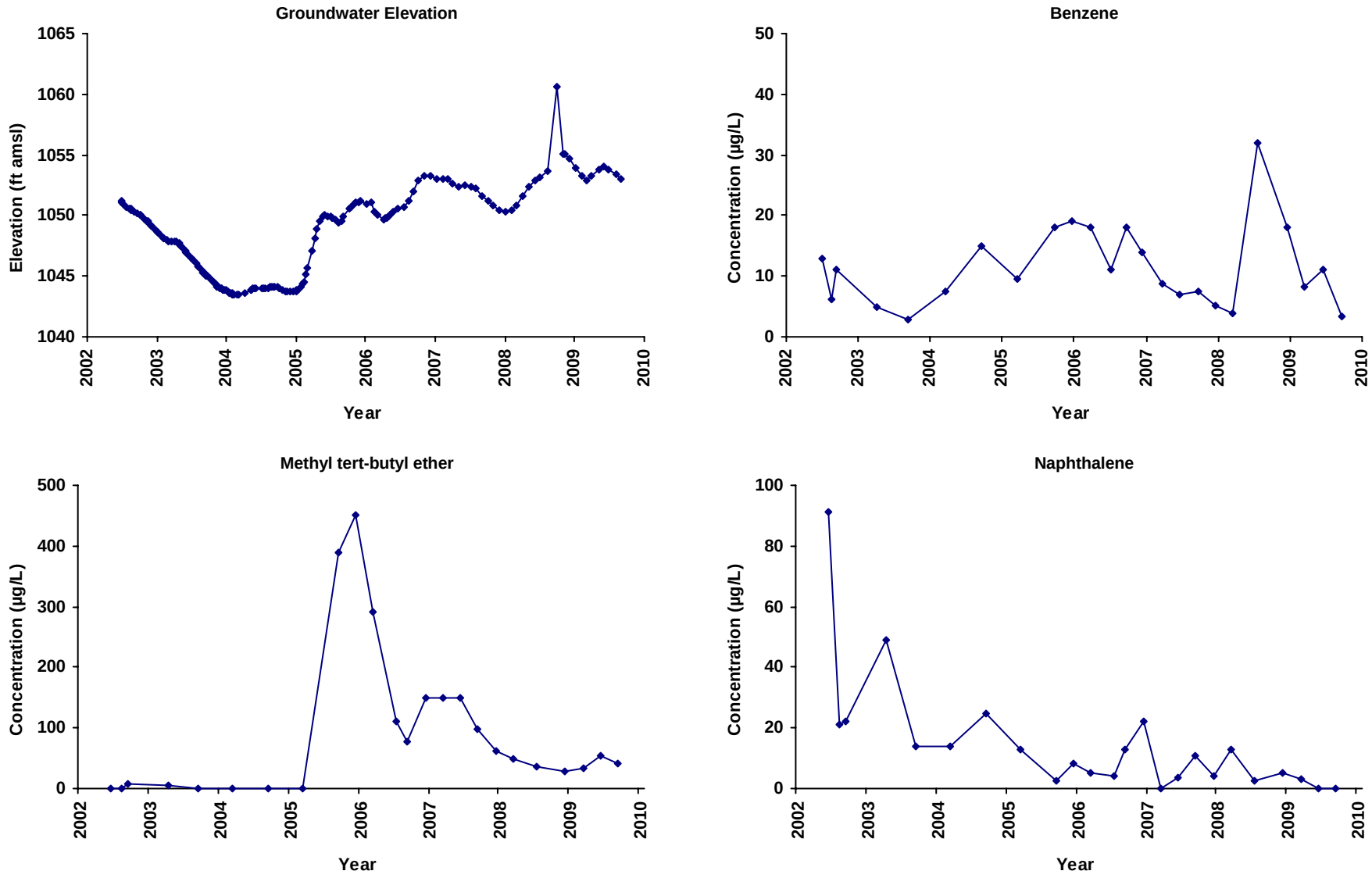

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-15
ASE-68A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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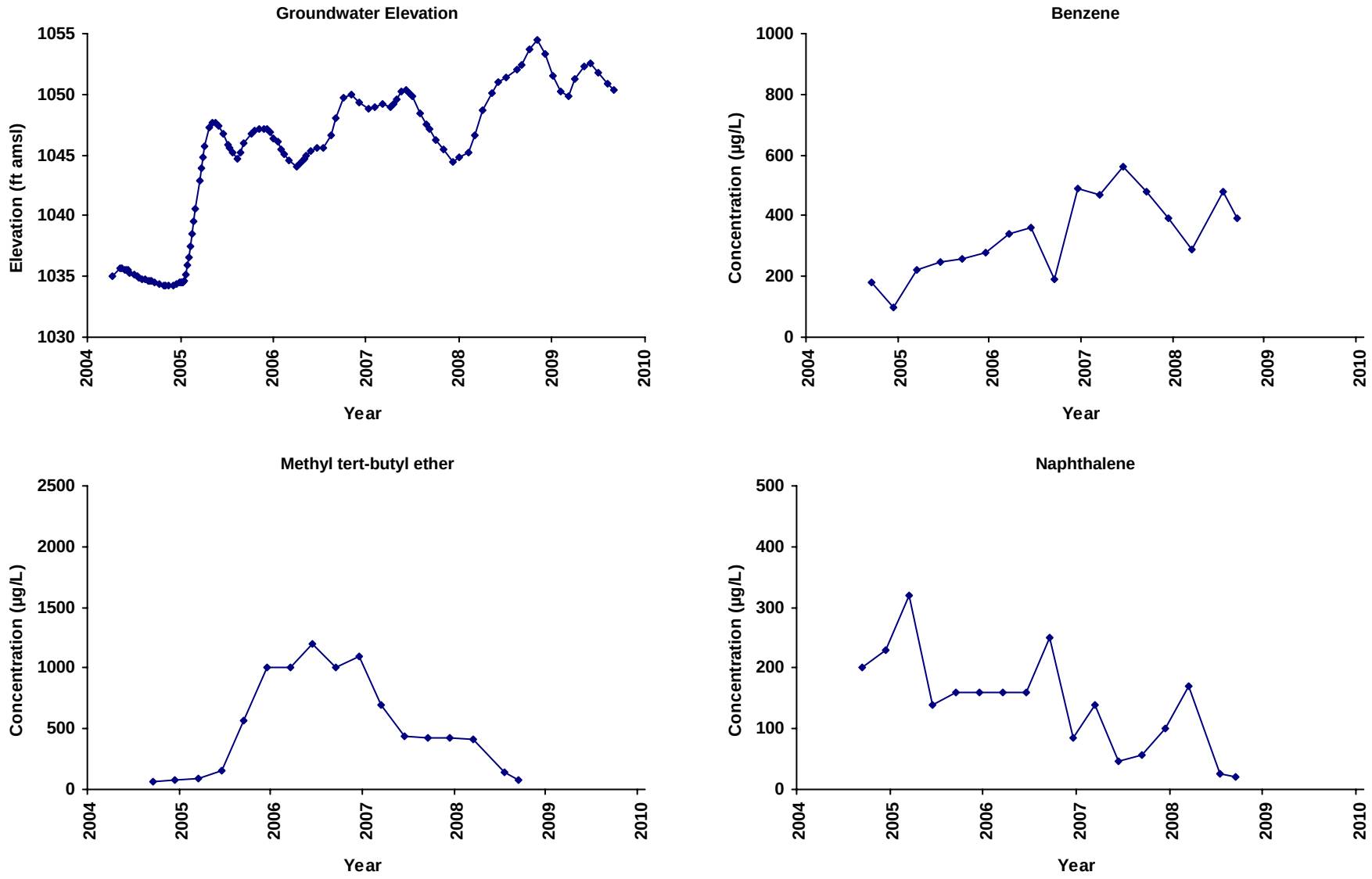

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-16
ASE-89A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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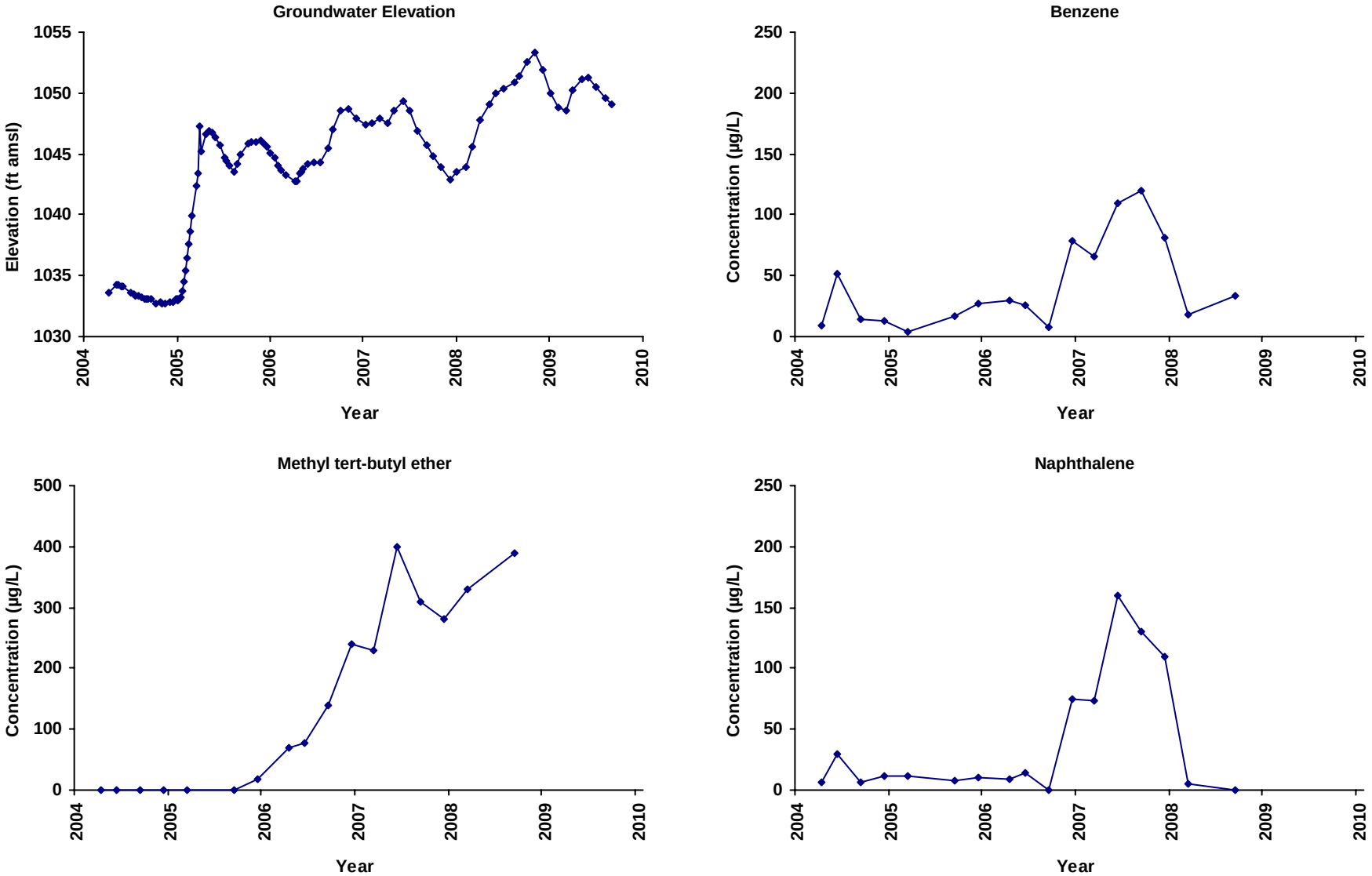

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-17
ASE-90A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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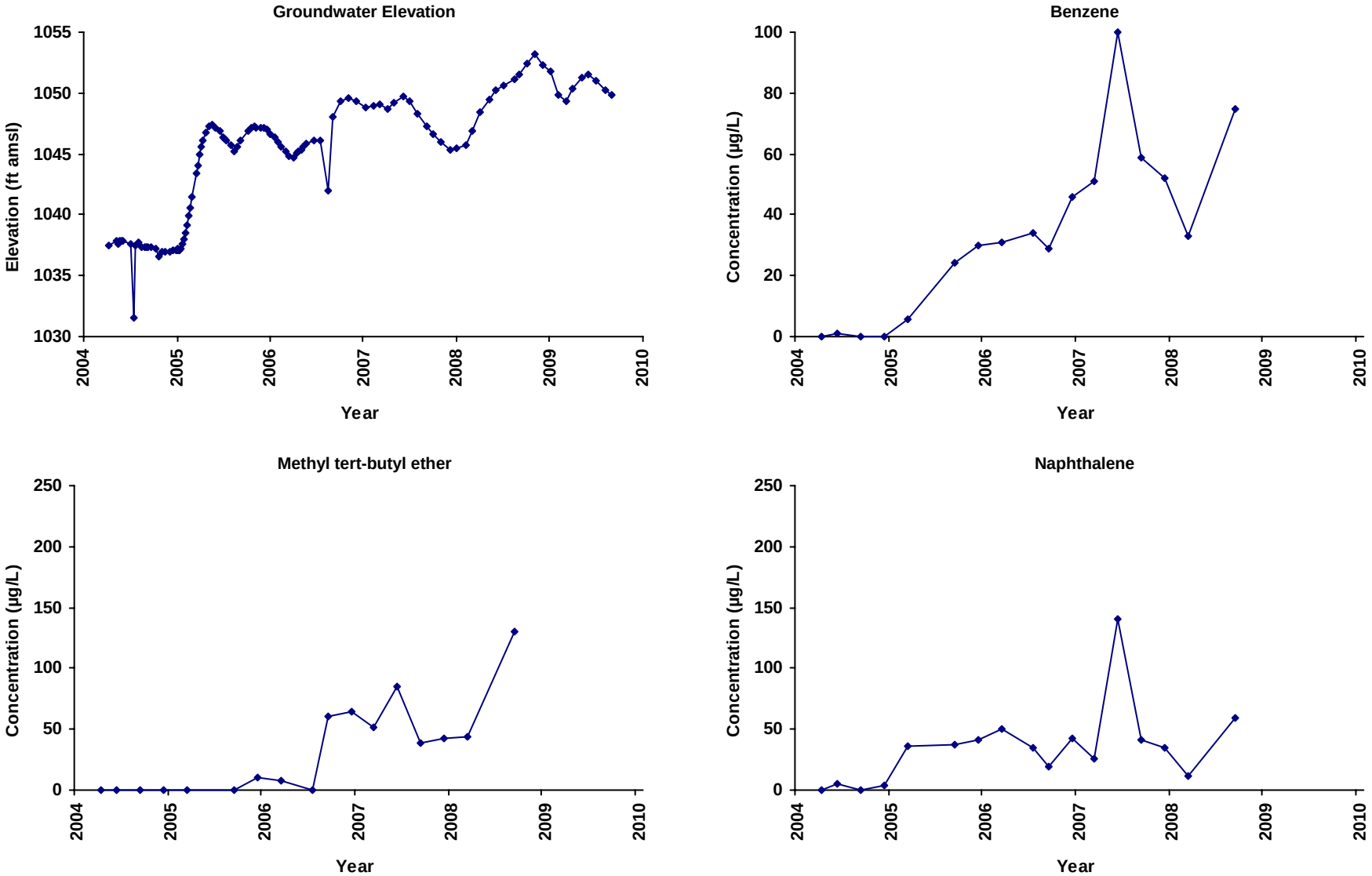

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-18
ASE-91A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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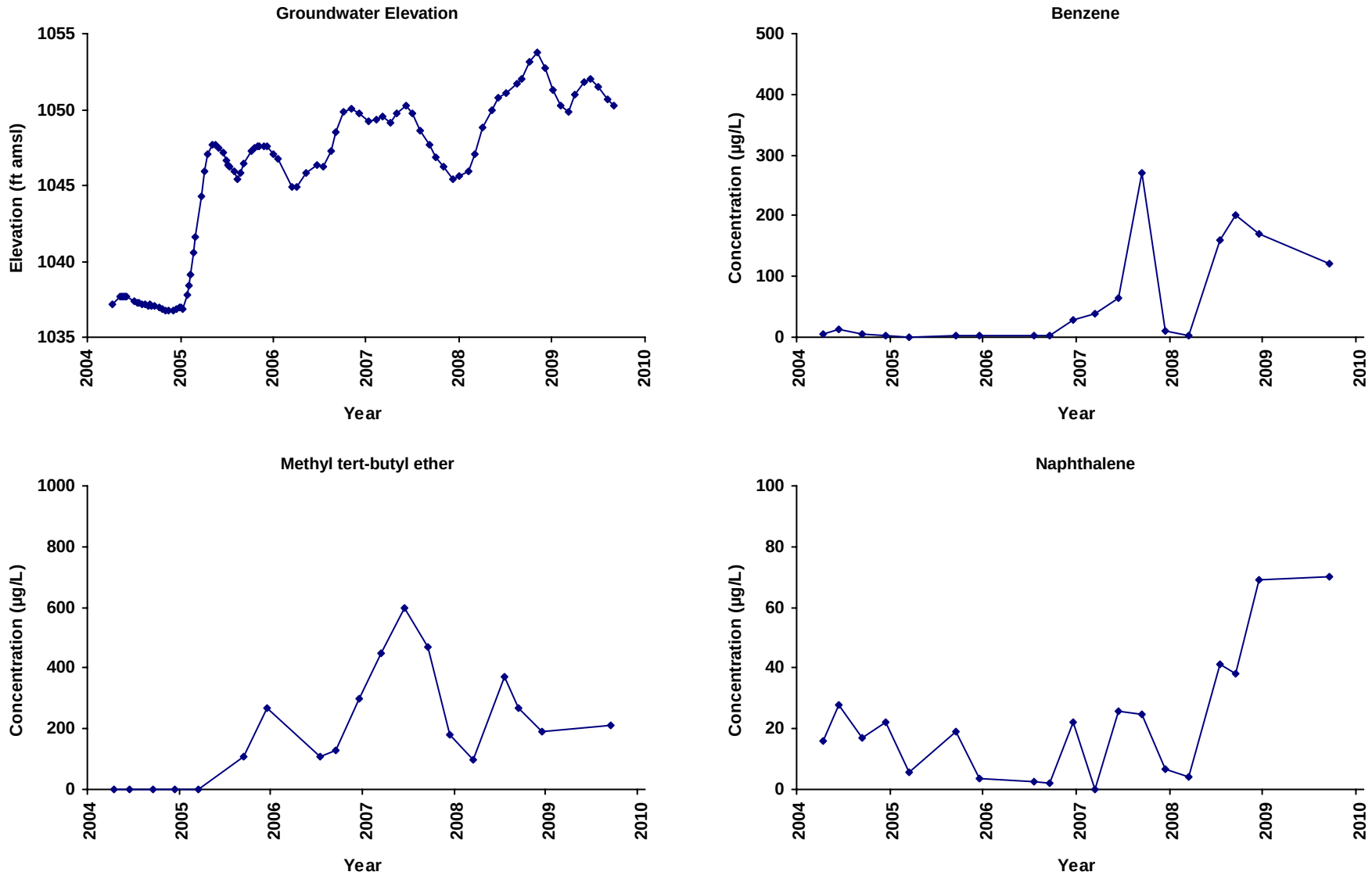

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-19
ASE-92A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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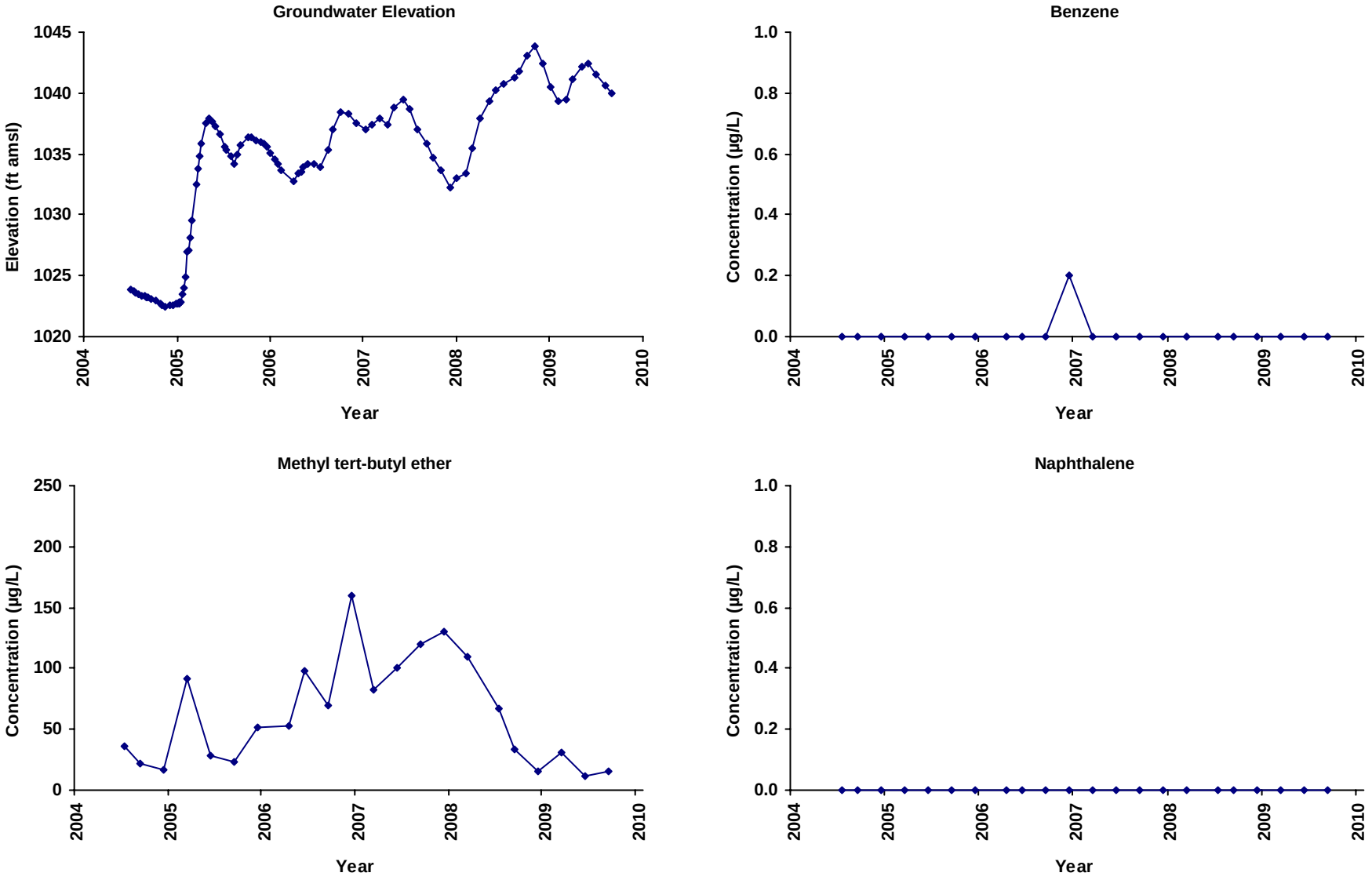

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-20
ASE-95A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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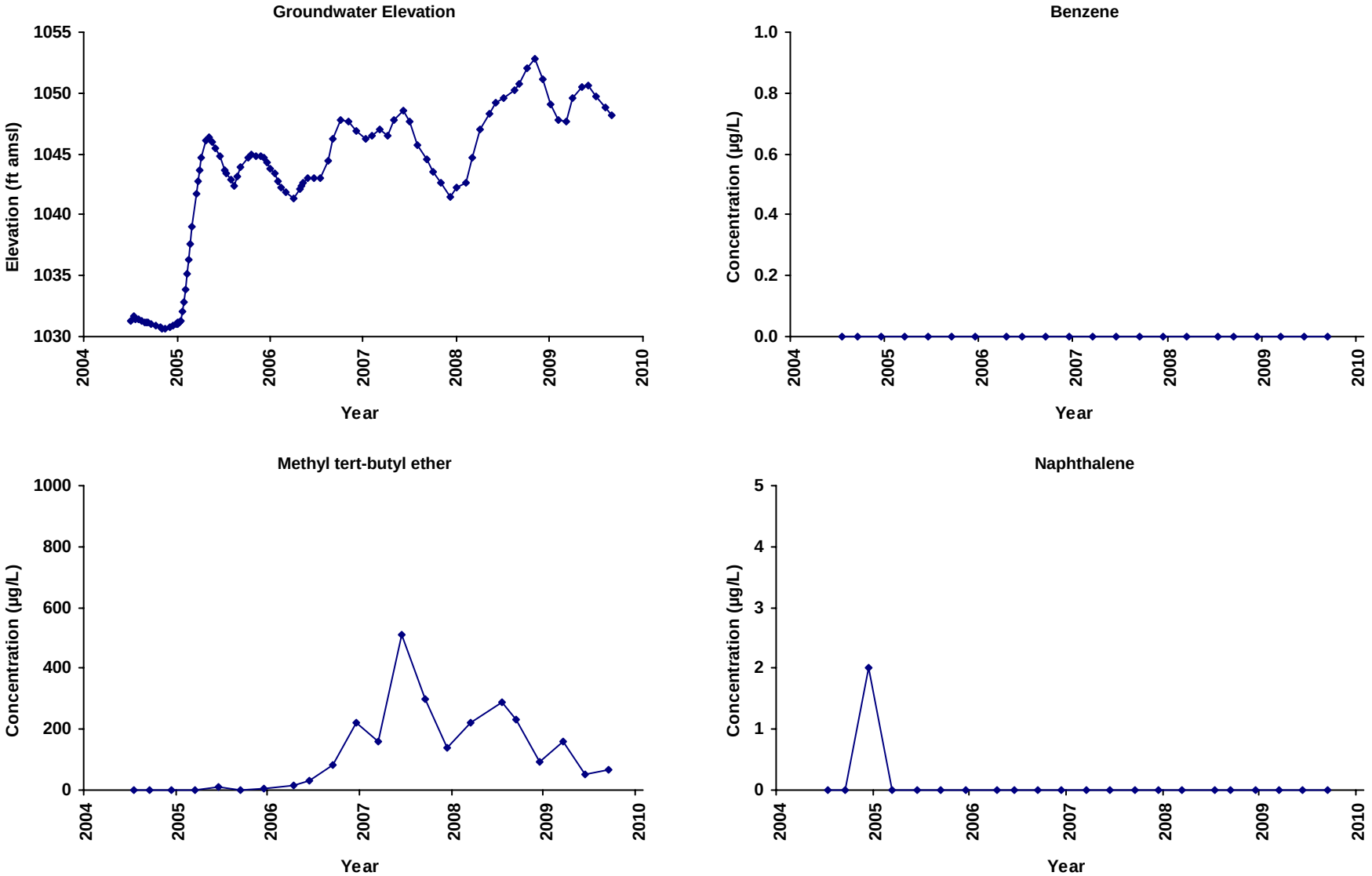

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-21
ASE-96A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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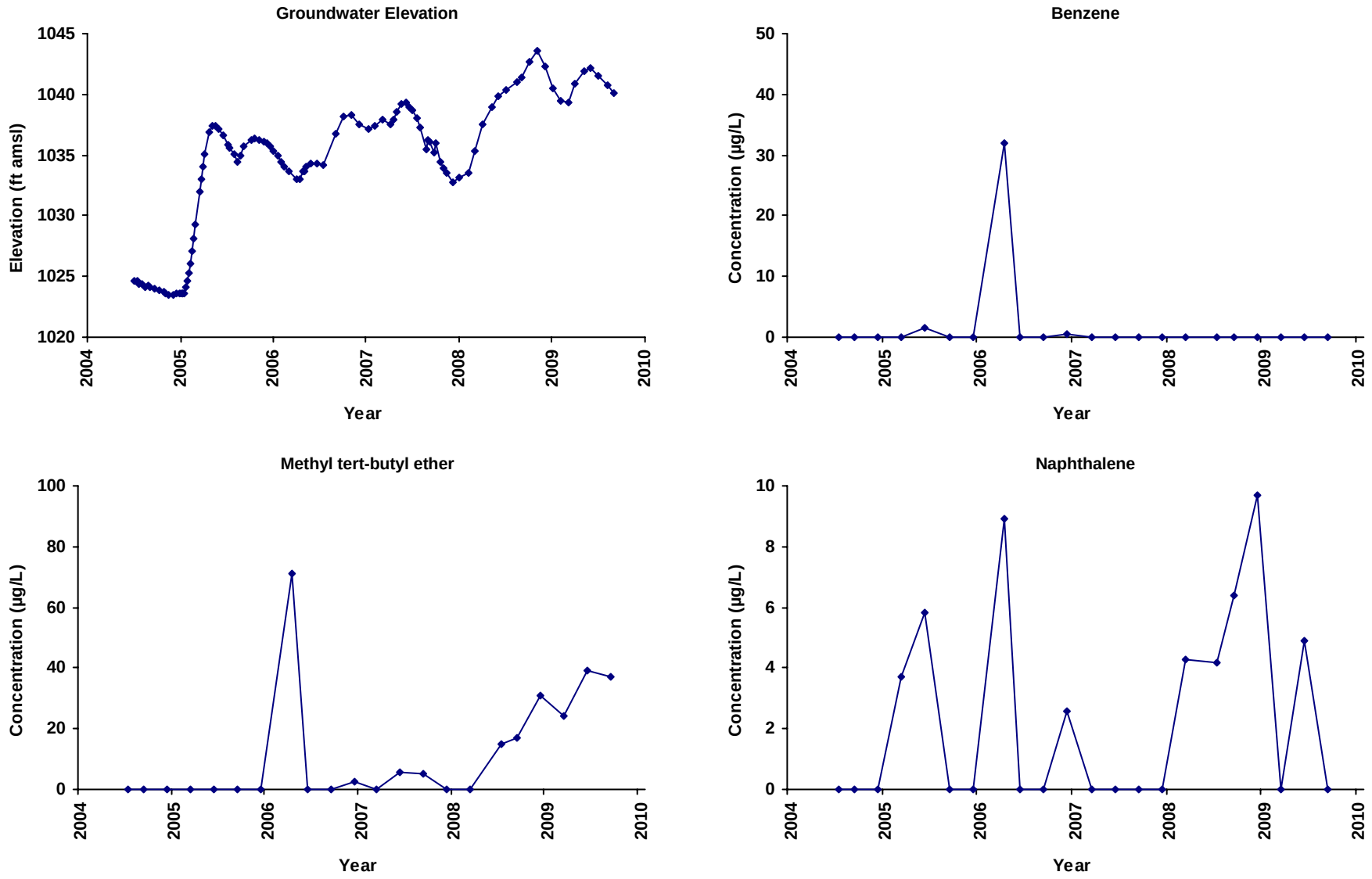

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-22
ASE-97A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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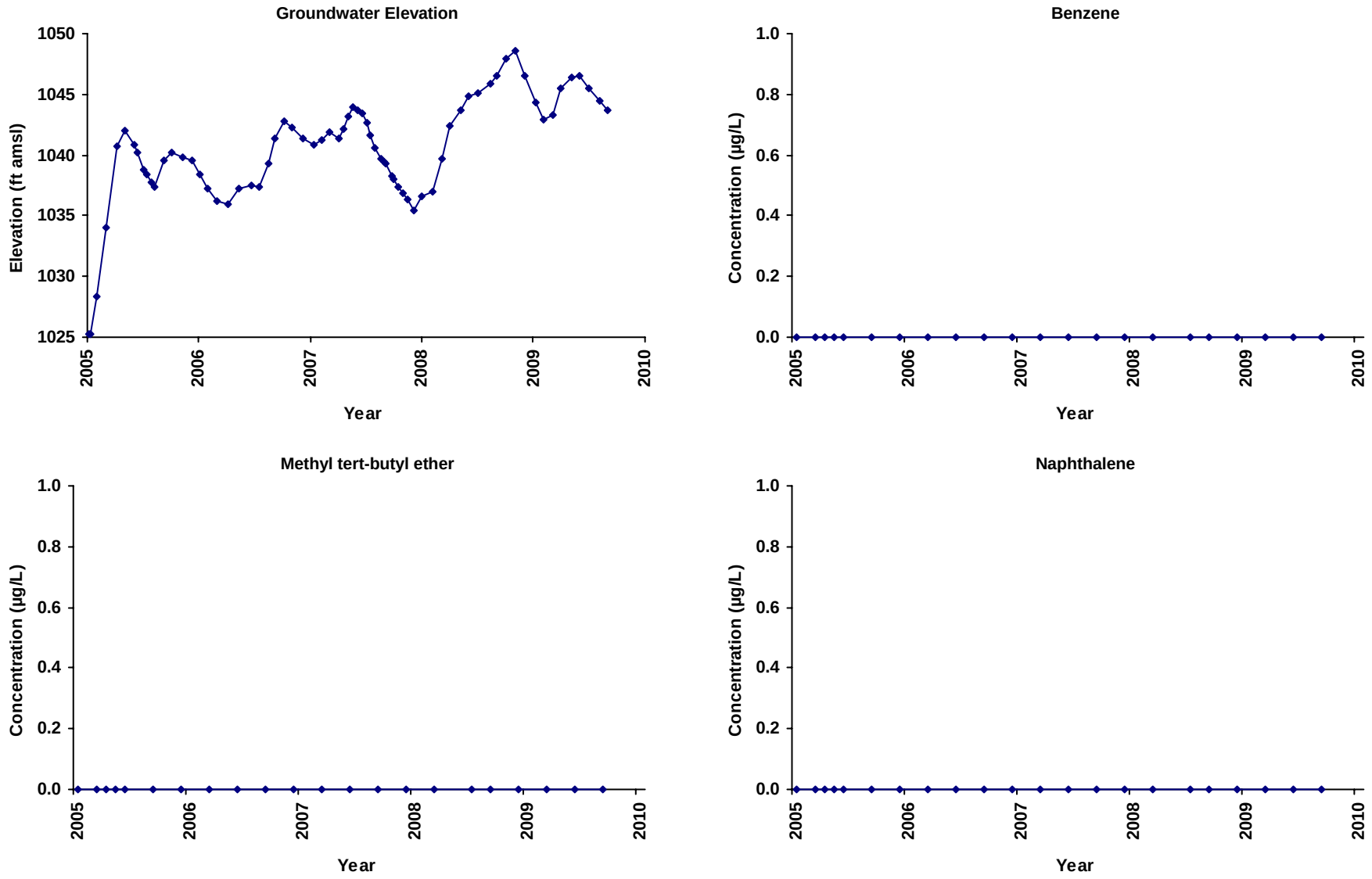

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-23
ASE-98A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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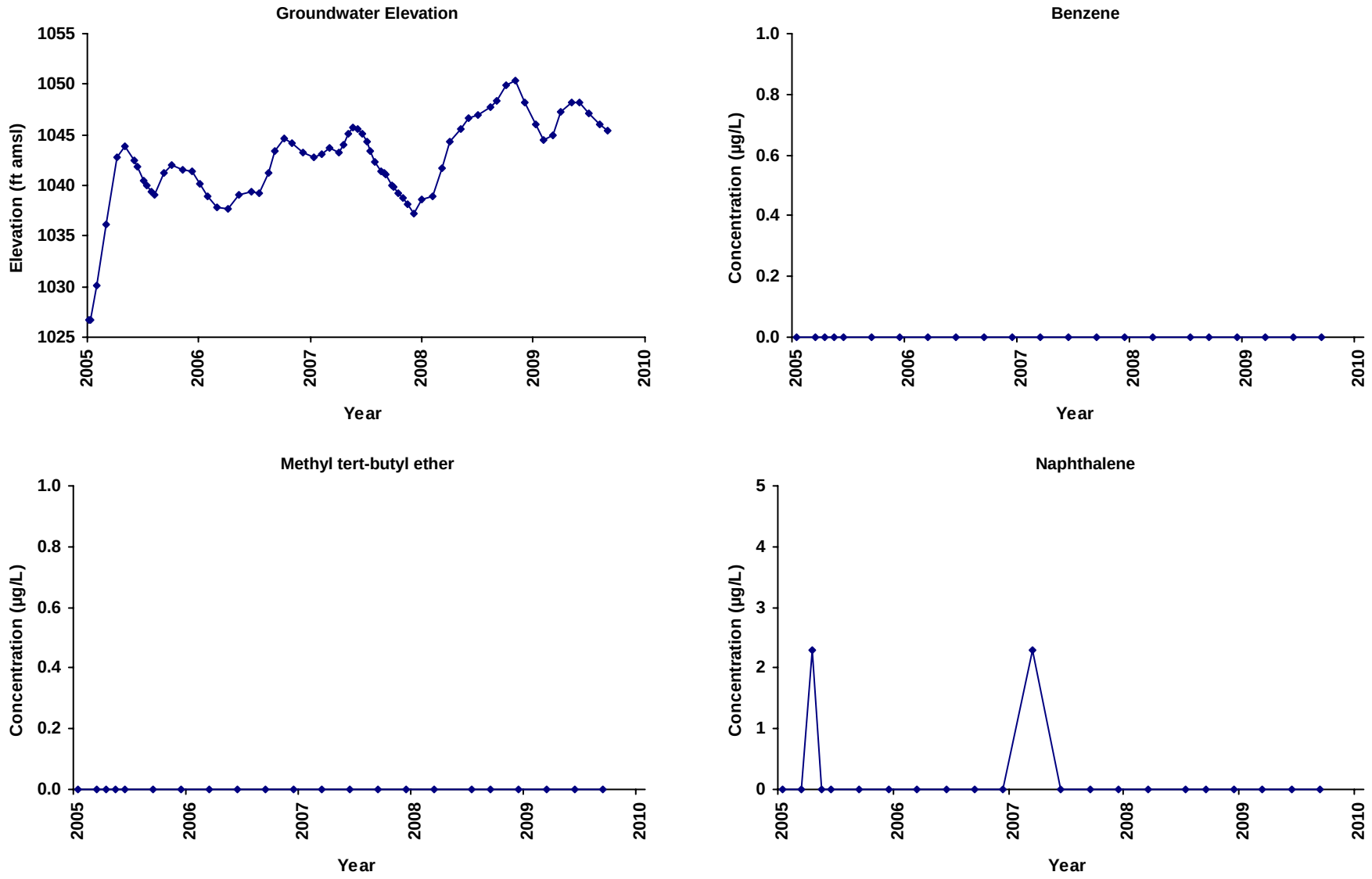

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-24
ASE-99A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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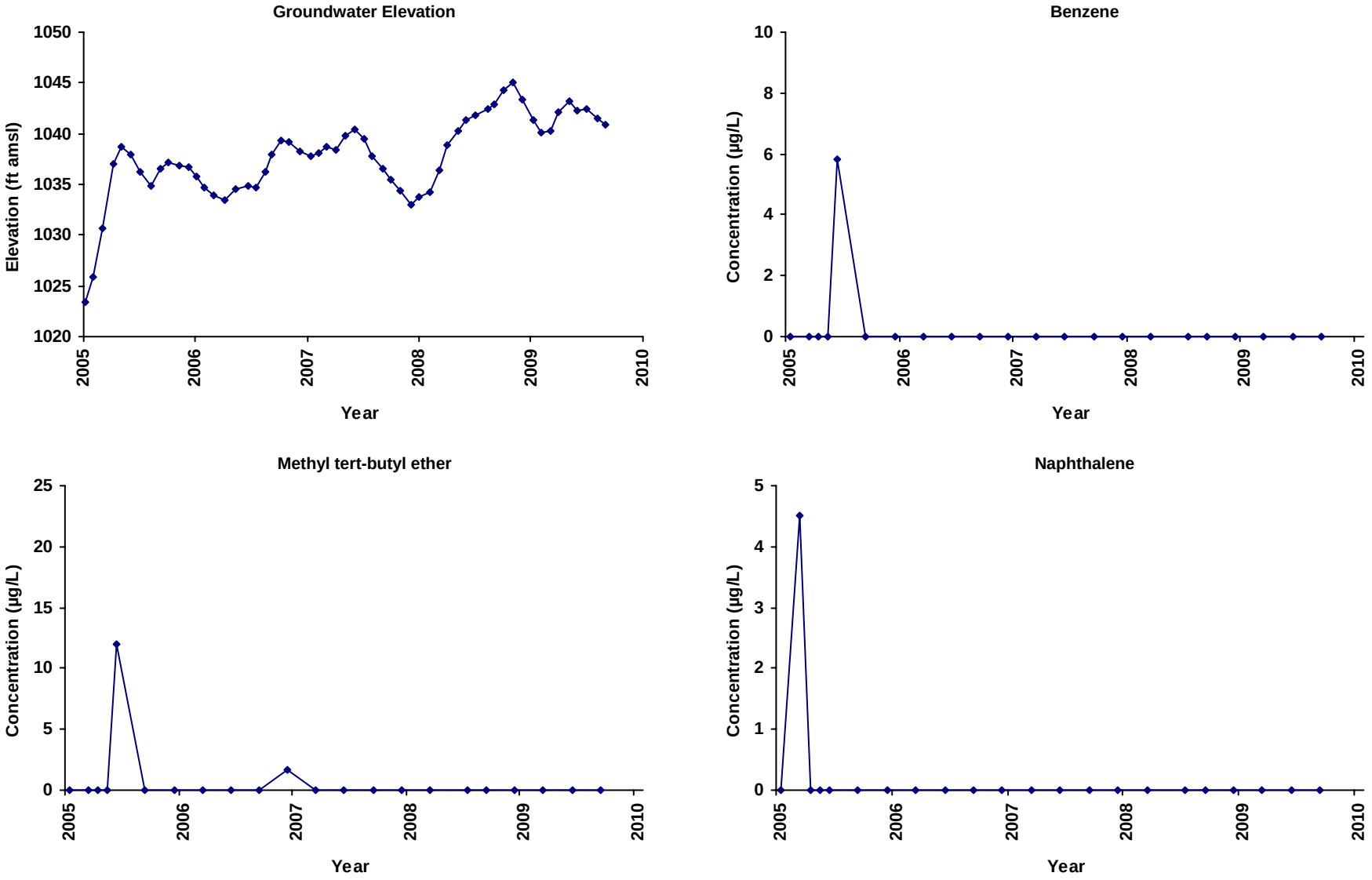

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-25
ASE-100A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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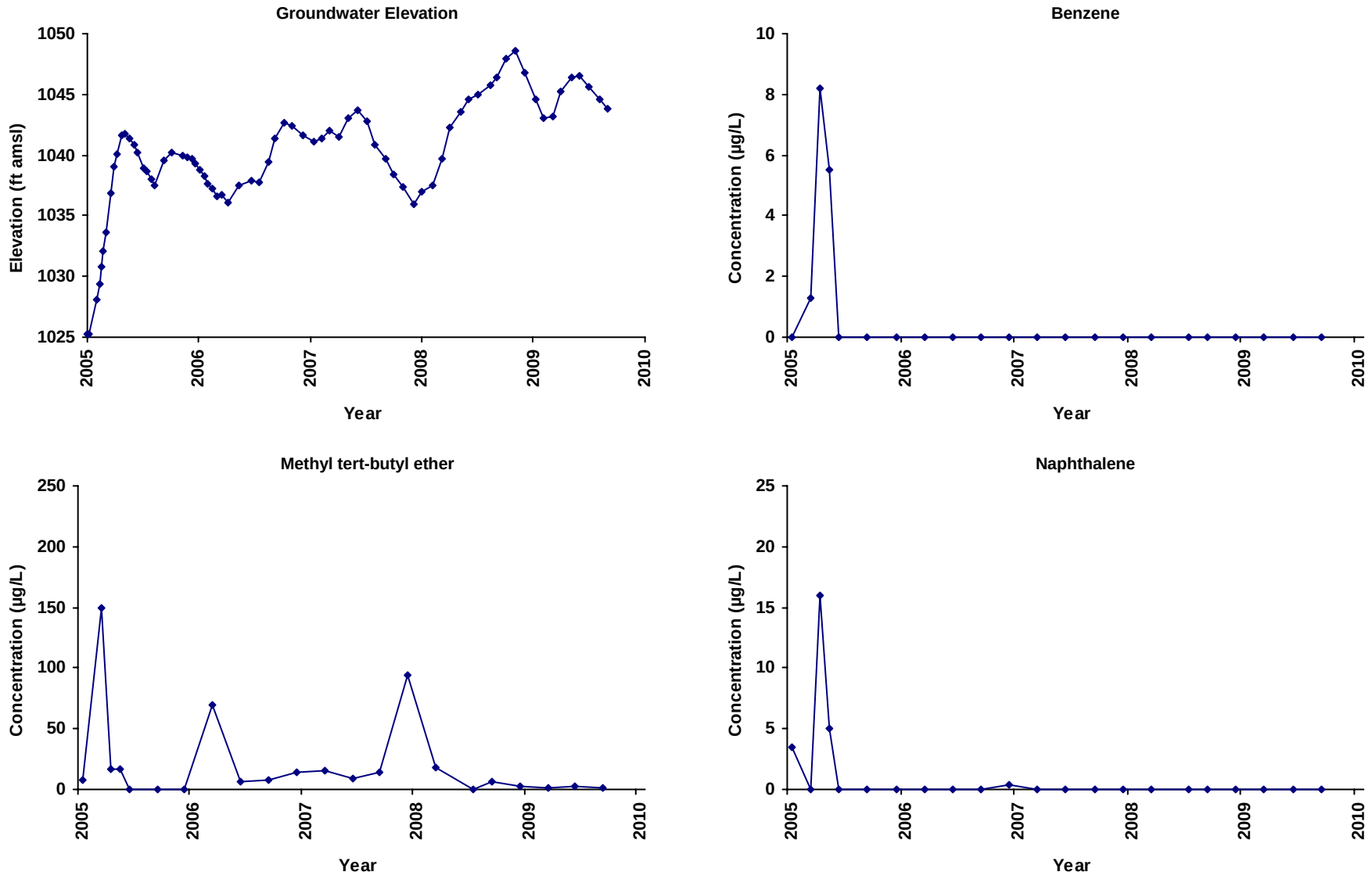

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-26
ASE-101A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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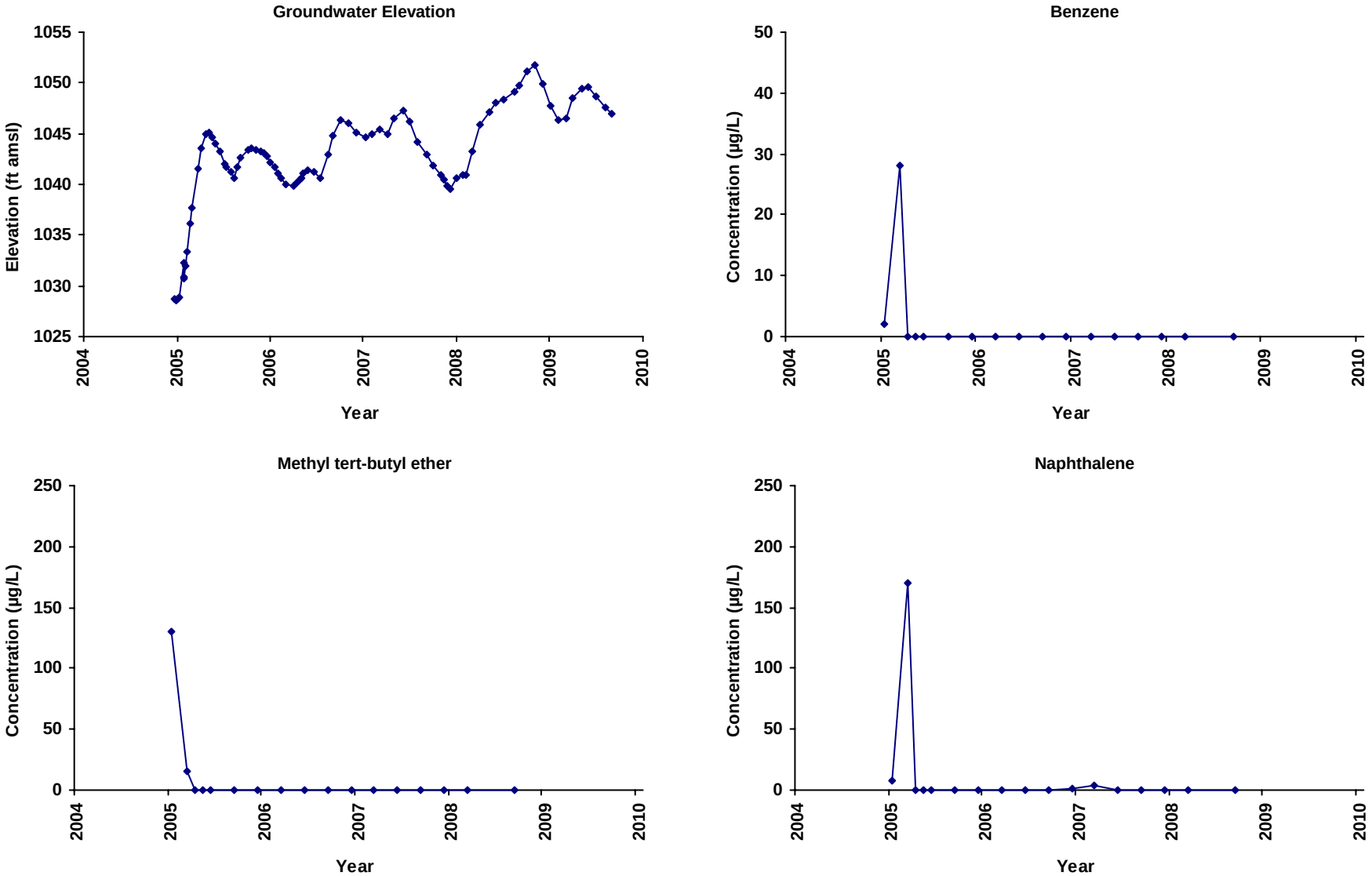

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-27
ASE-102A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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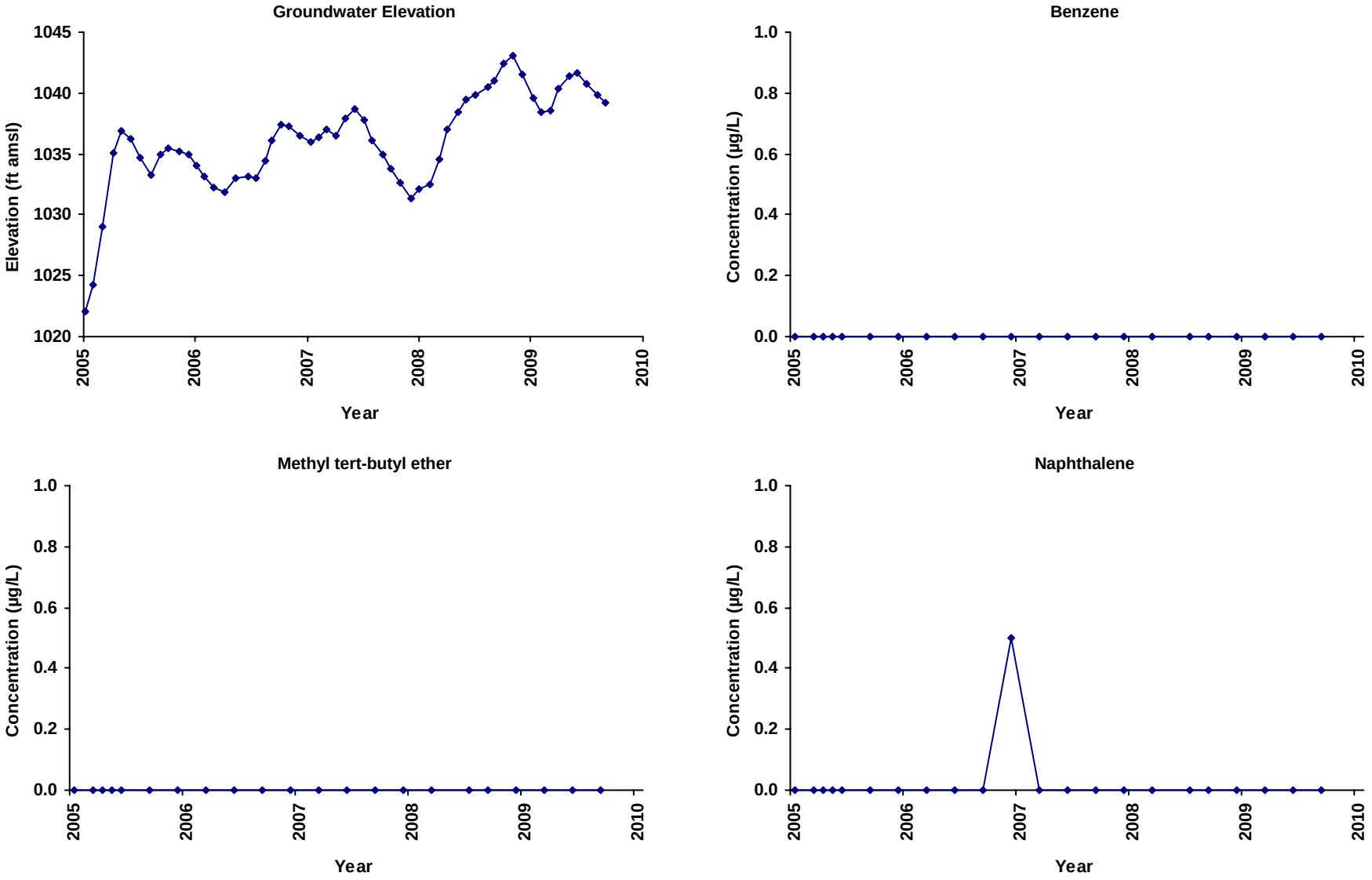

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-28
ASE-103A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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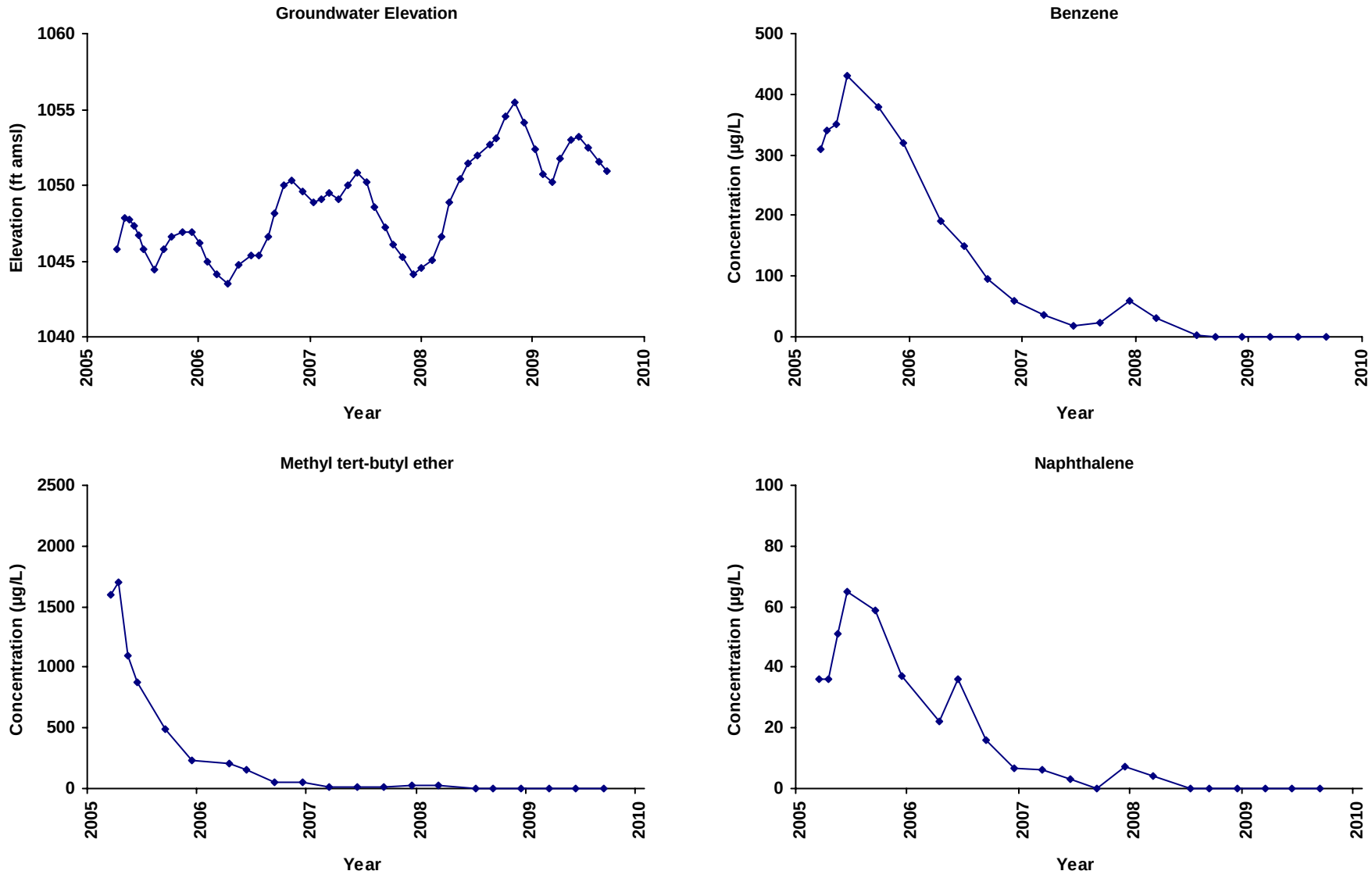

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-29
ASE-105A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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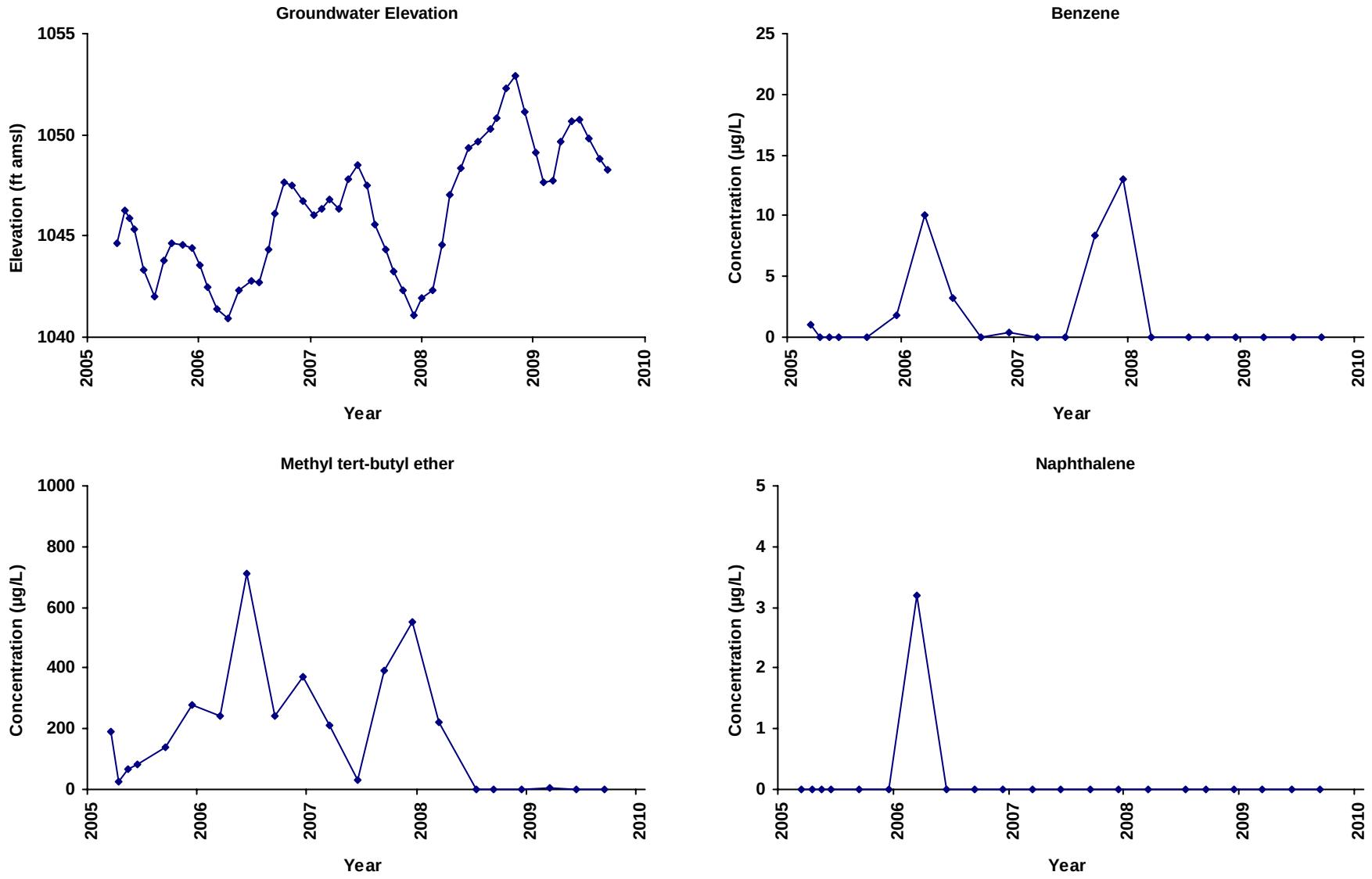

Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-30
ASE-106A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

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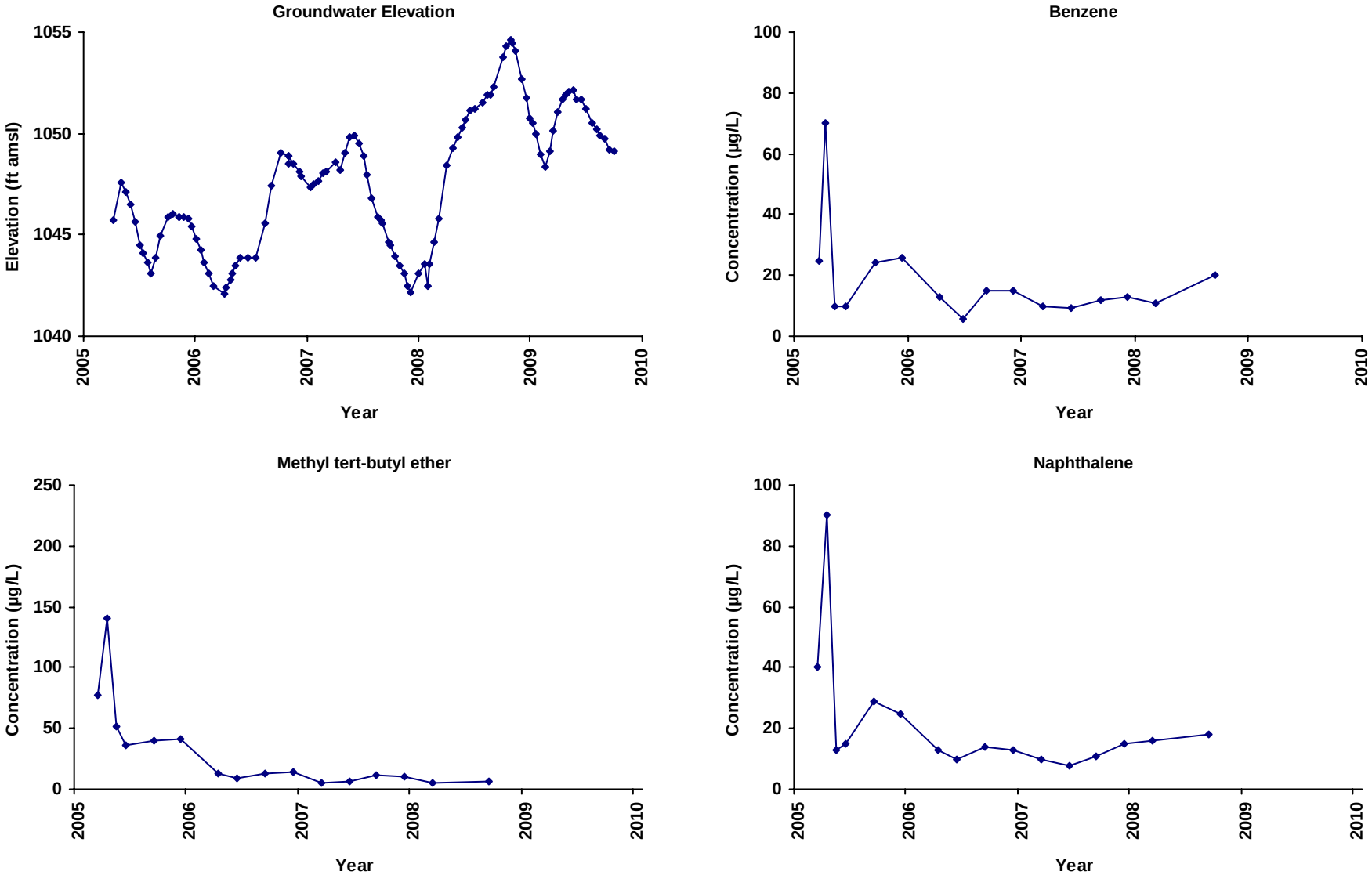
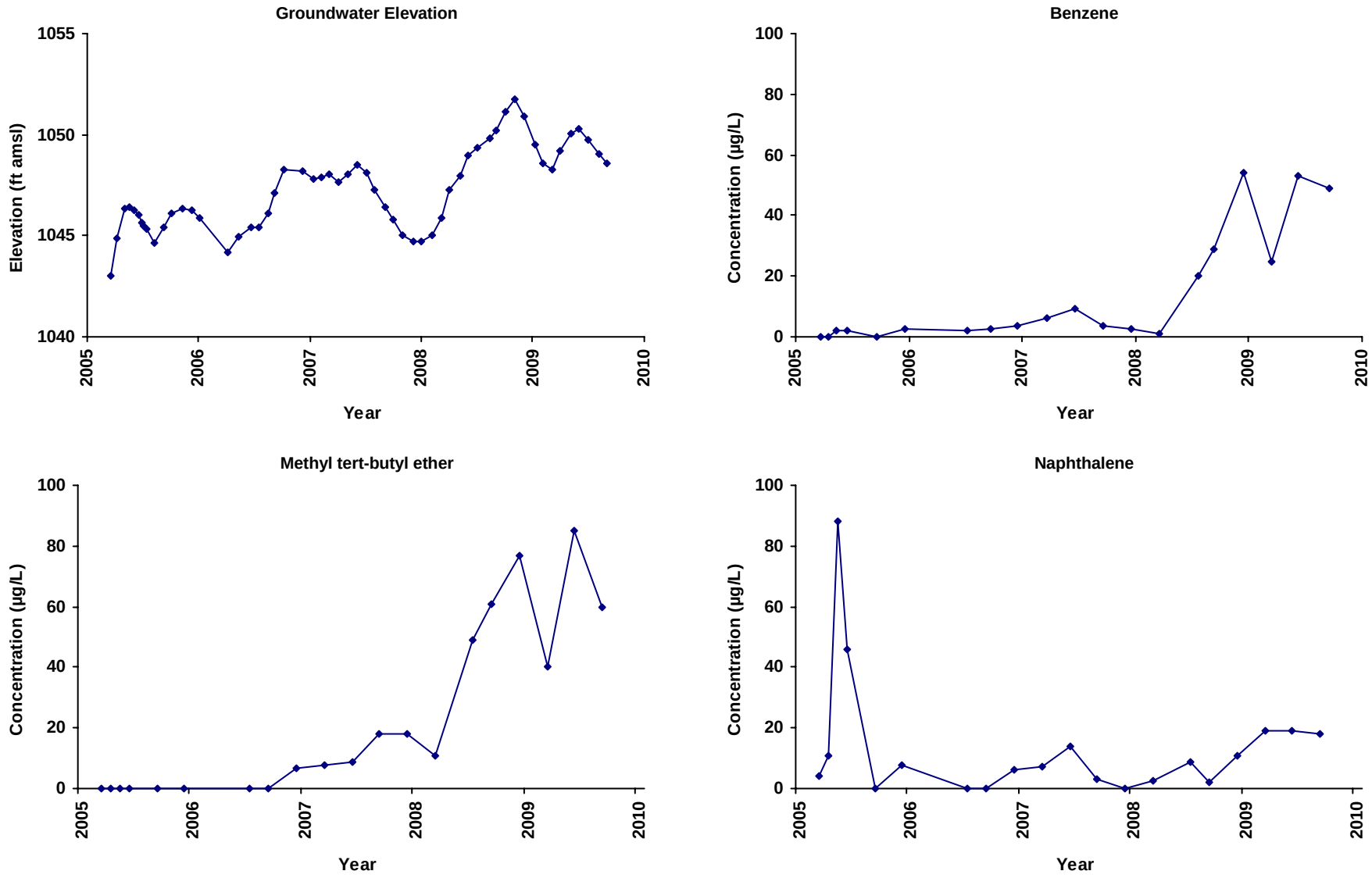


Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-31
ASE-107A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

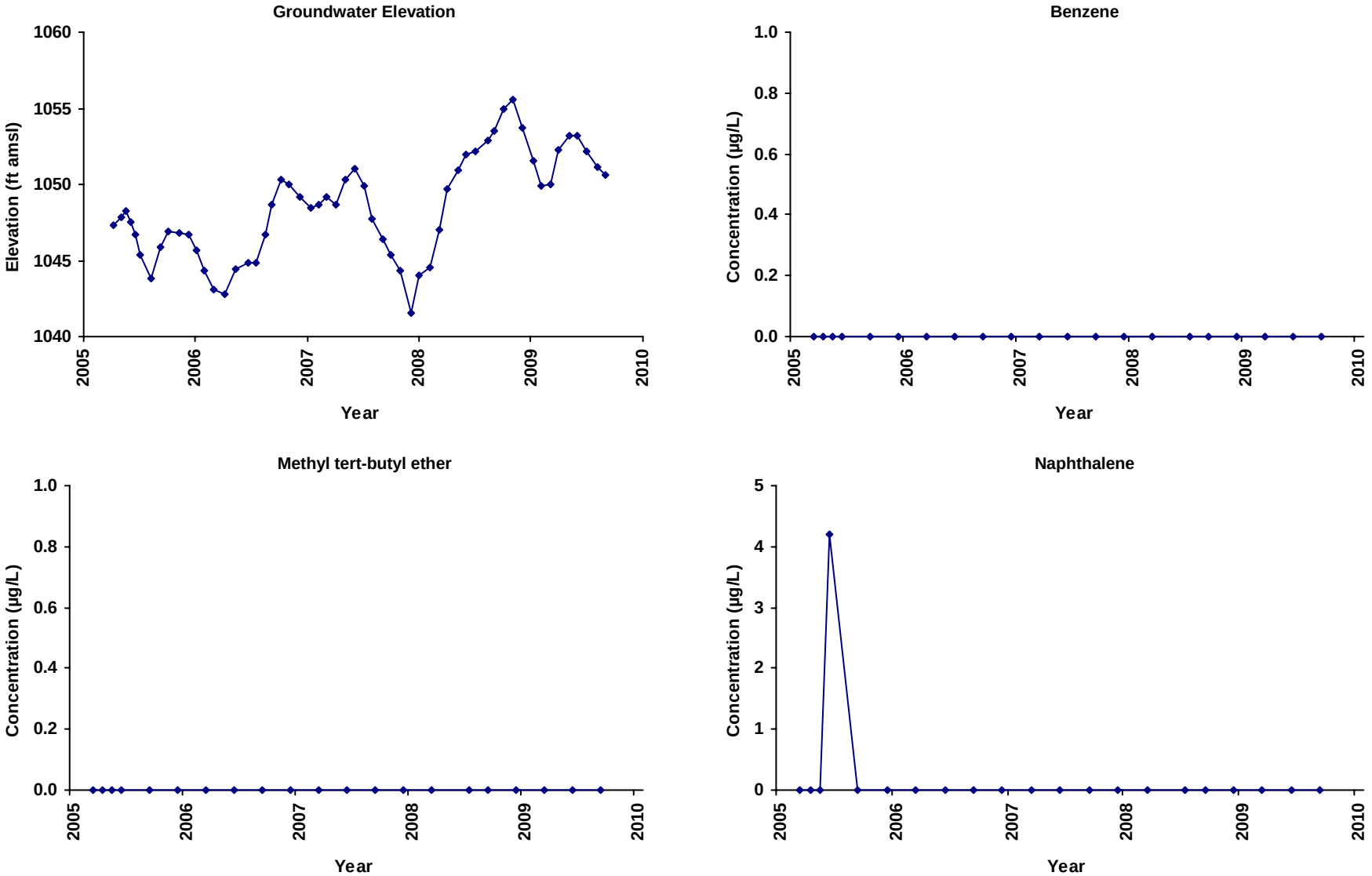
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-32
ASE-108A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

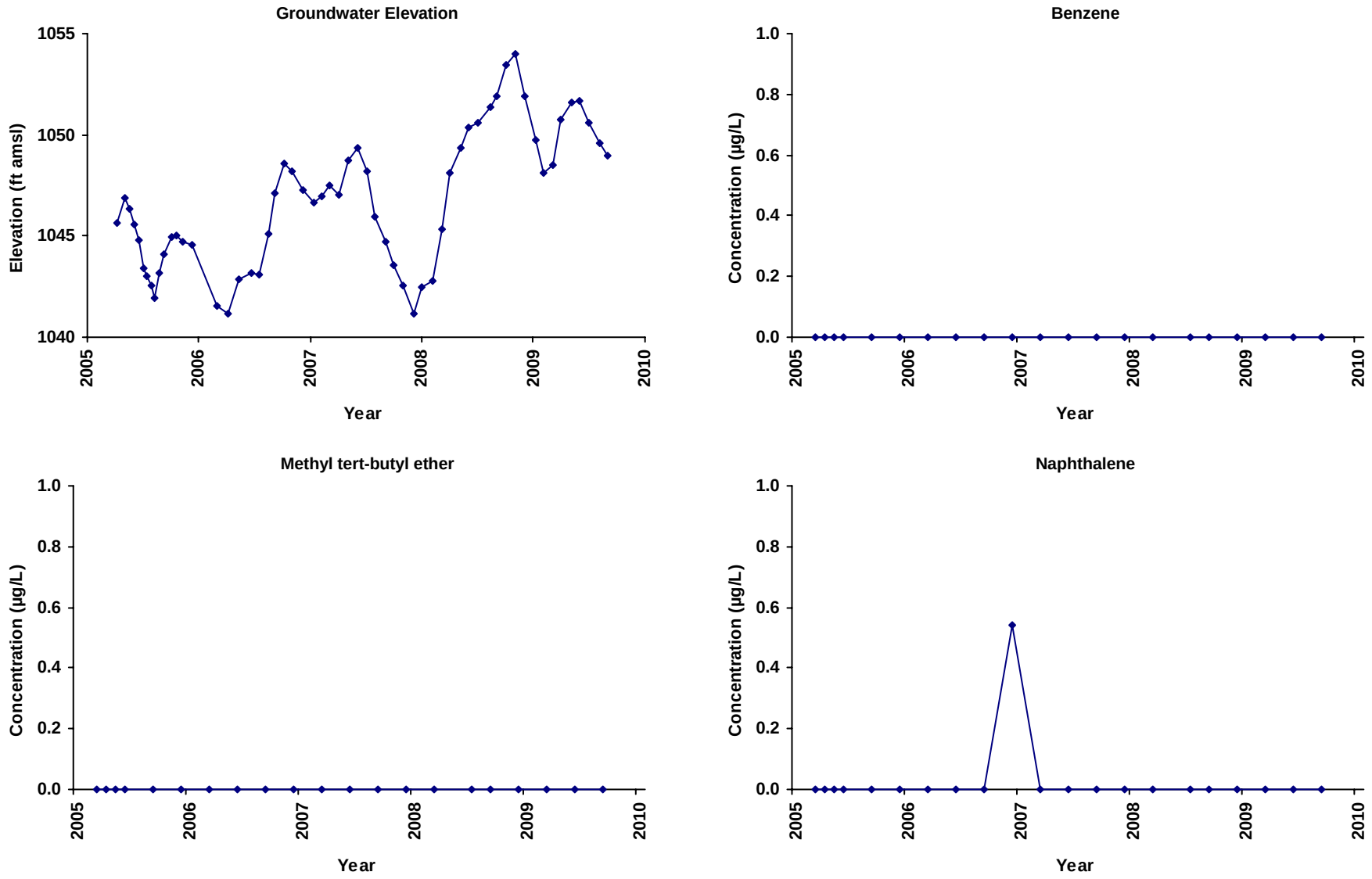
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-33
ASE-109A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

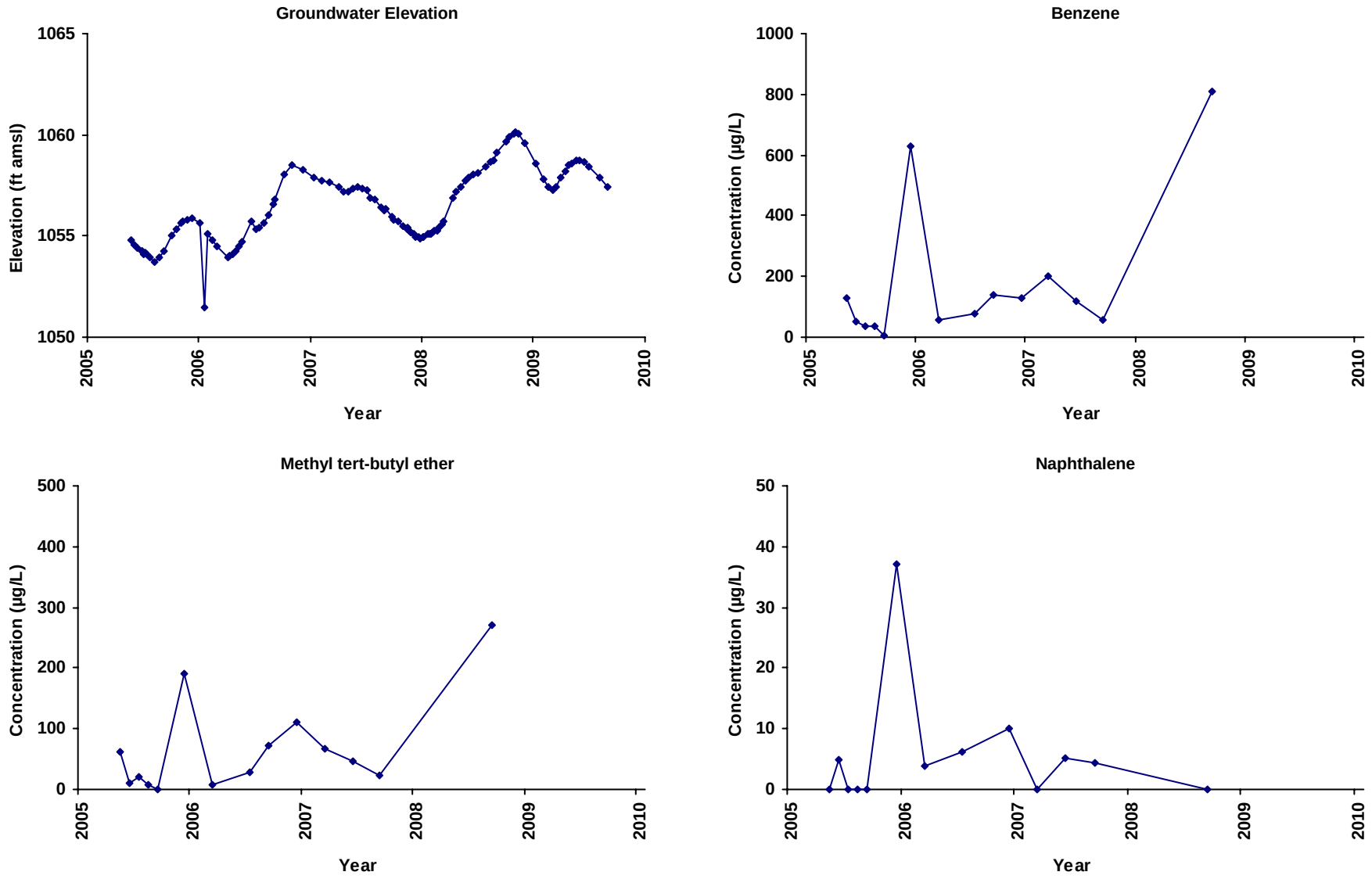
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-34
ASE-110A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

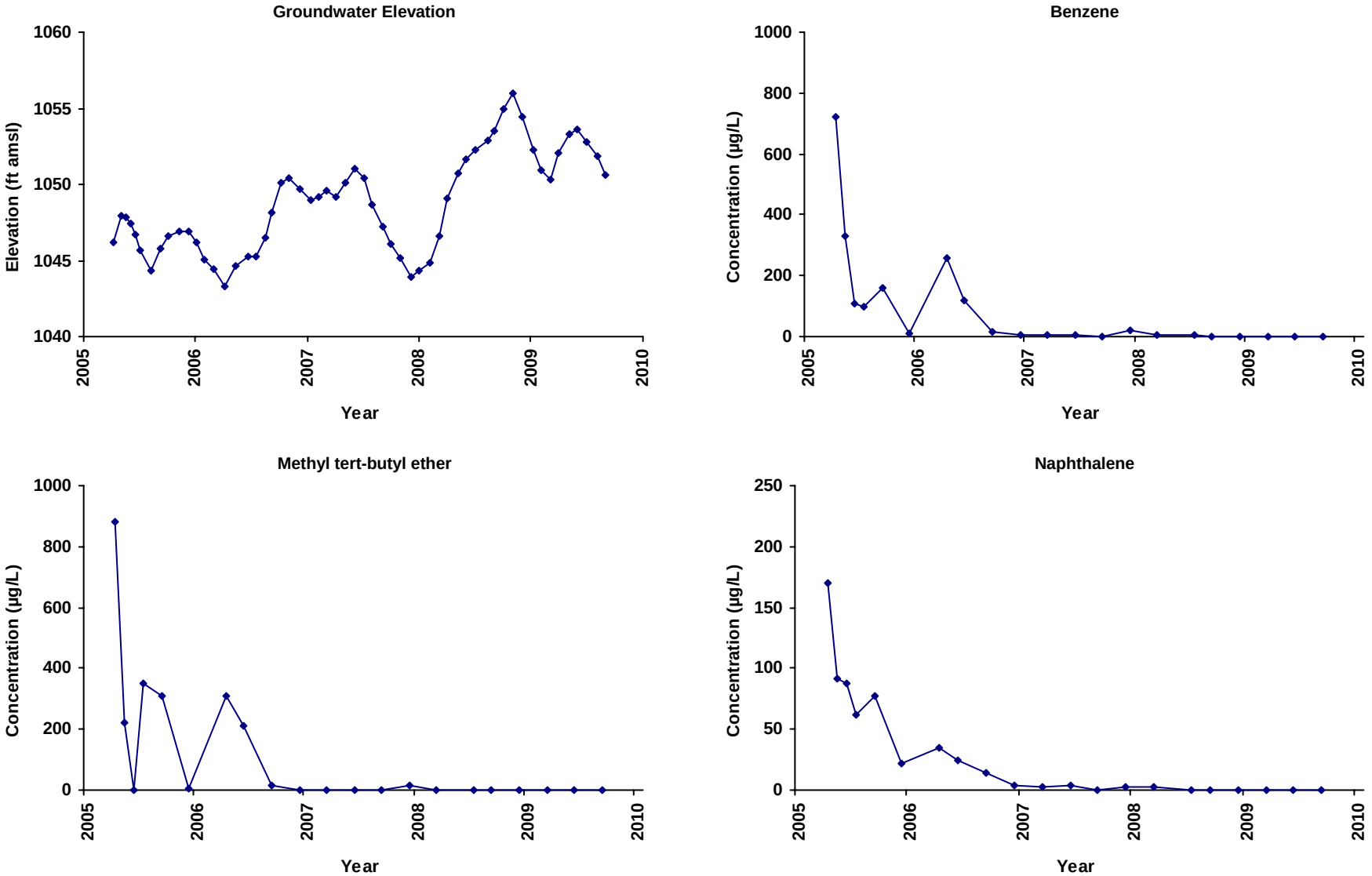
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-35
ASE-111A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

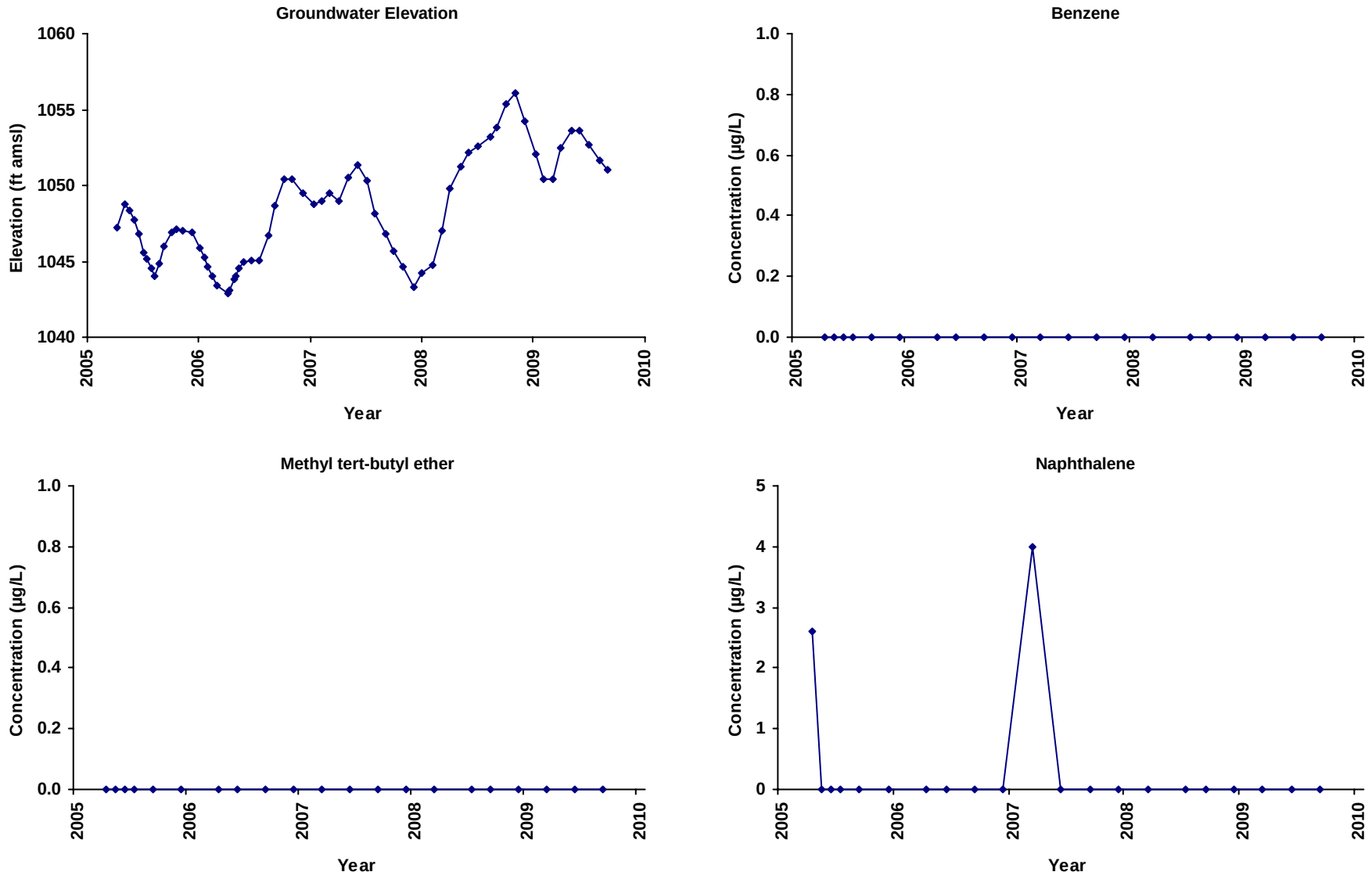
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-36
ASE-112A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

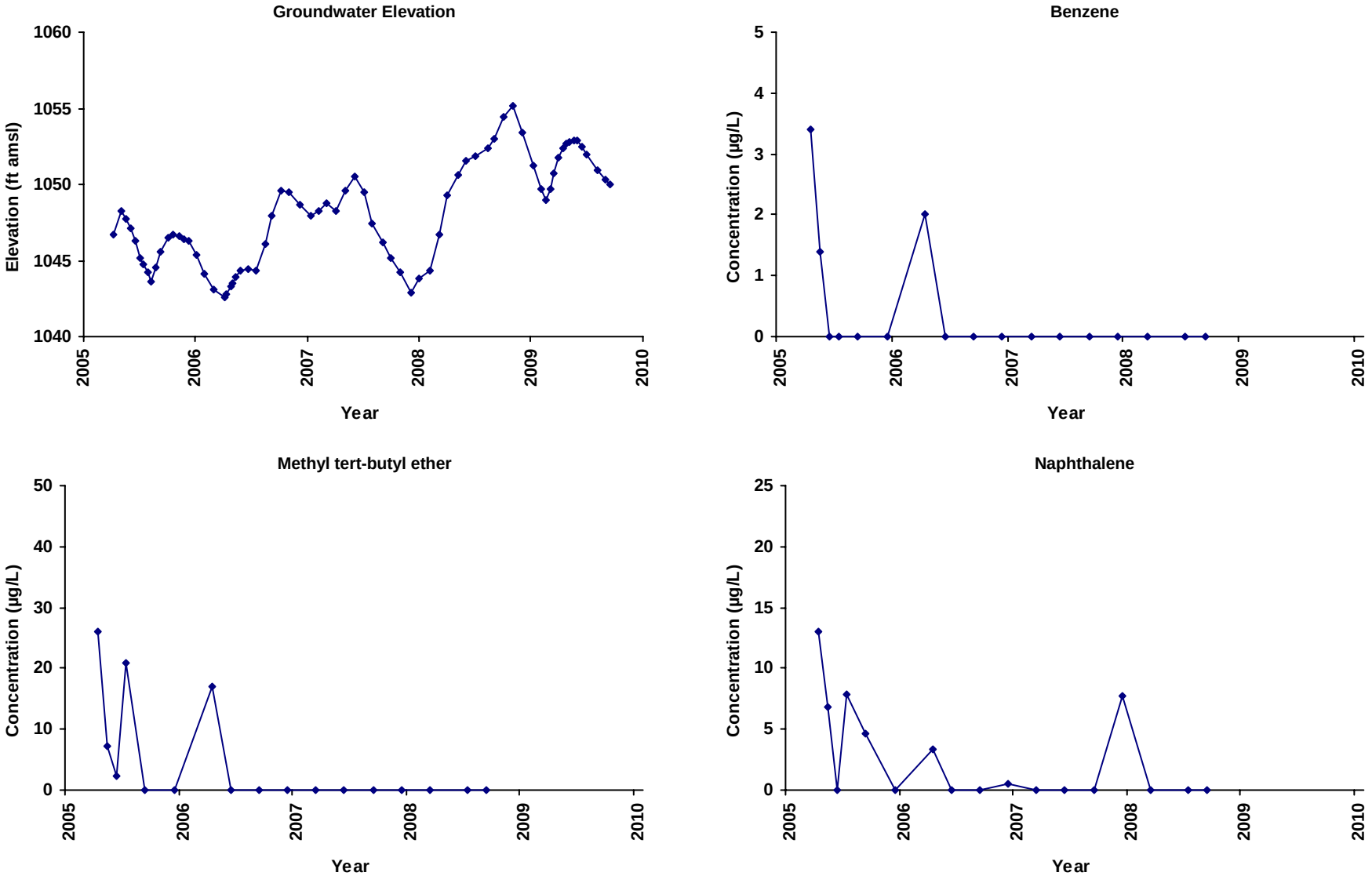
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-37
ASE-113A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

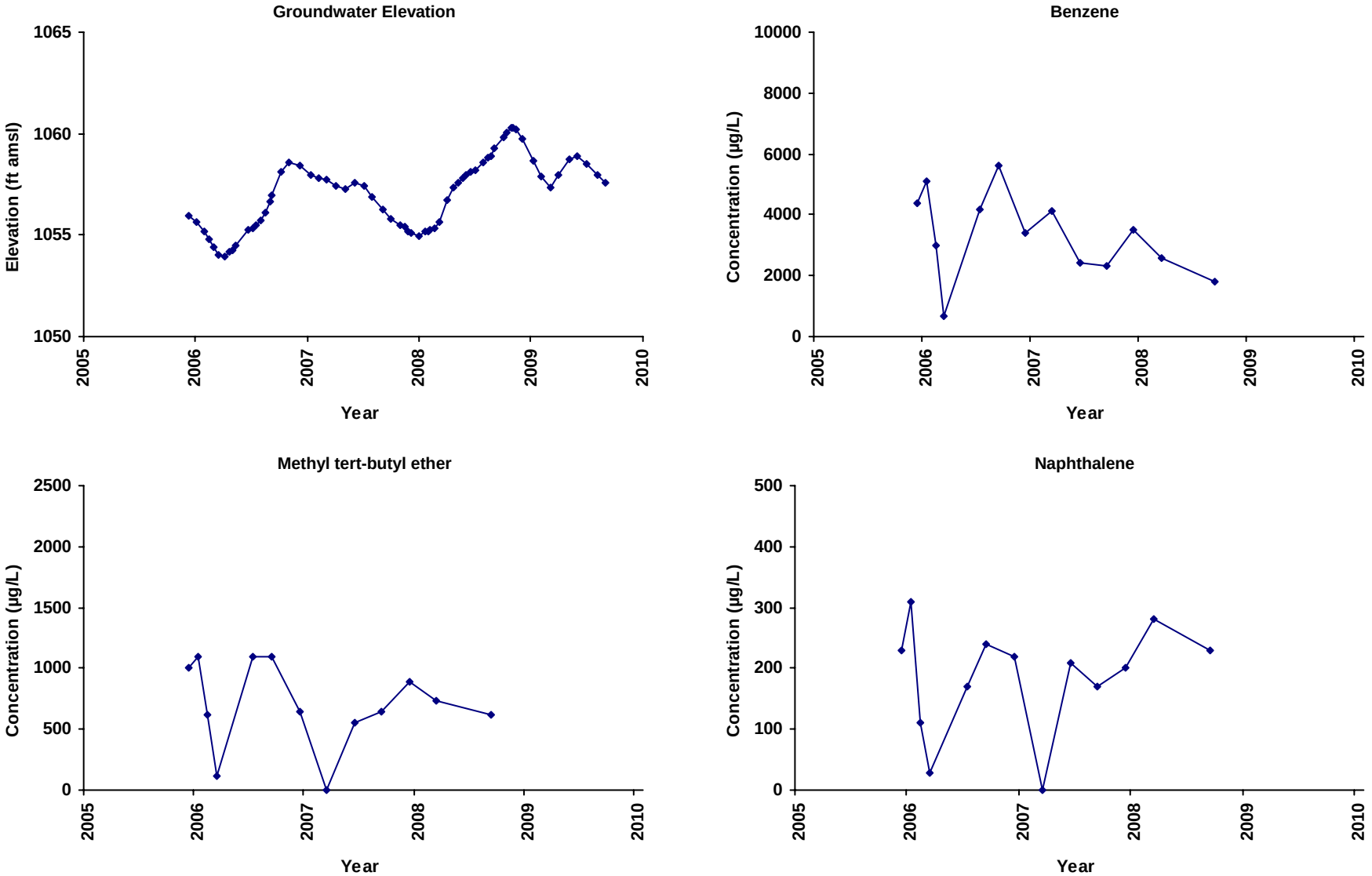
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-38
ASE-114A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

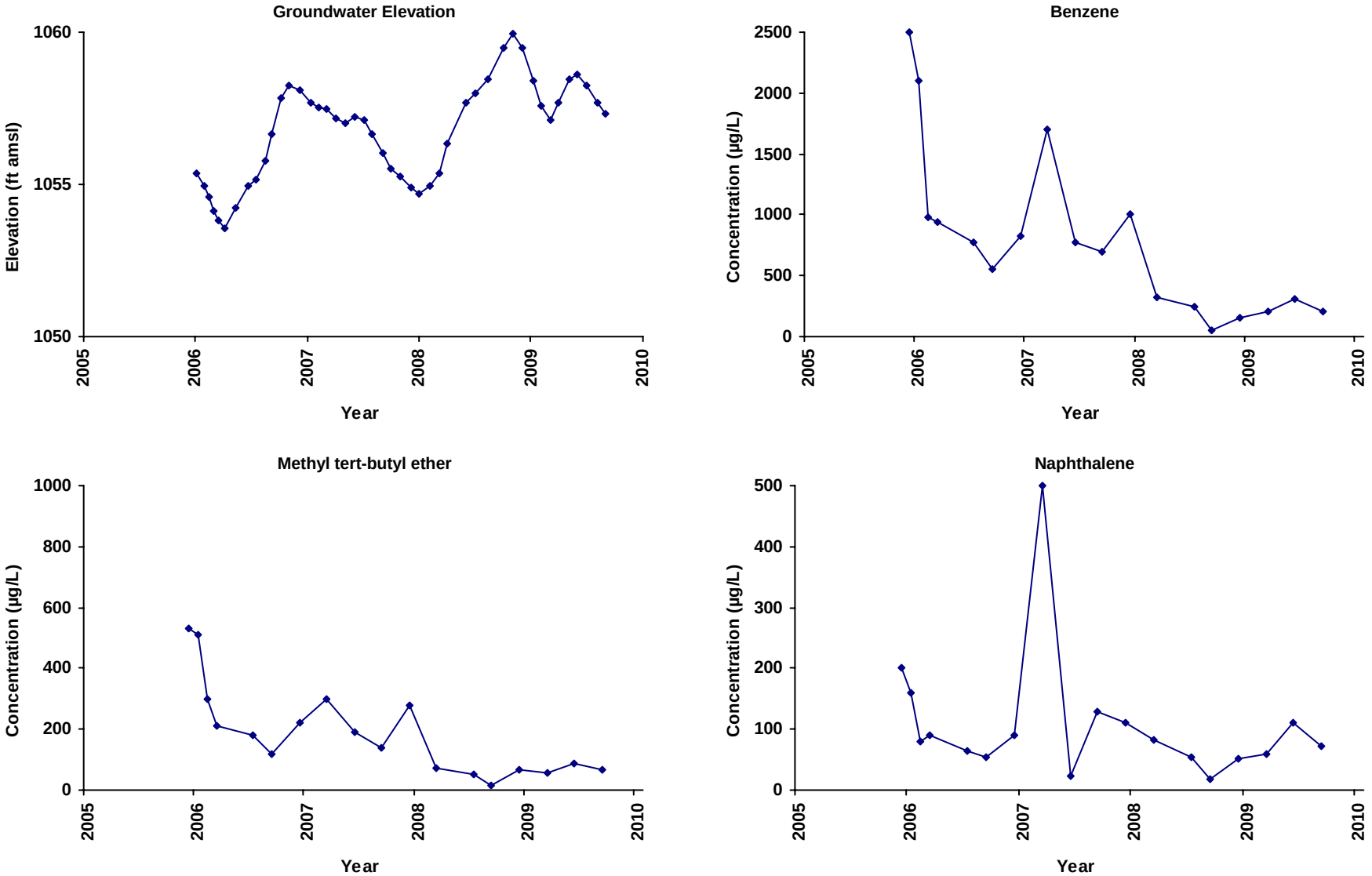
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-39
ASE-115A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

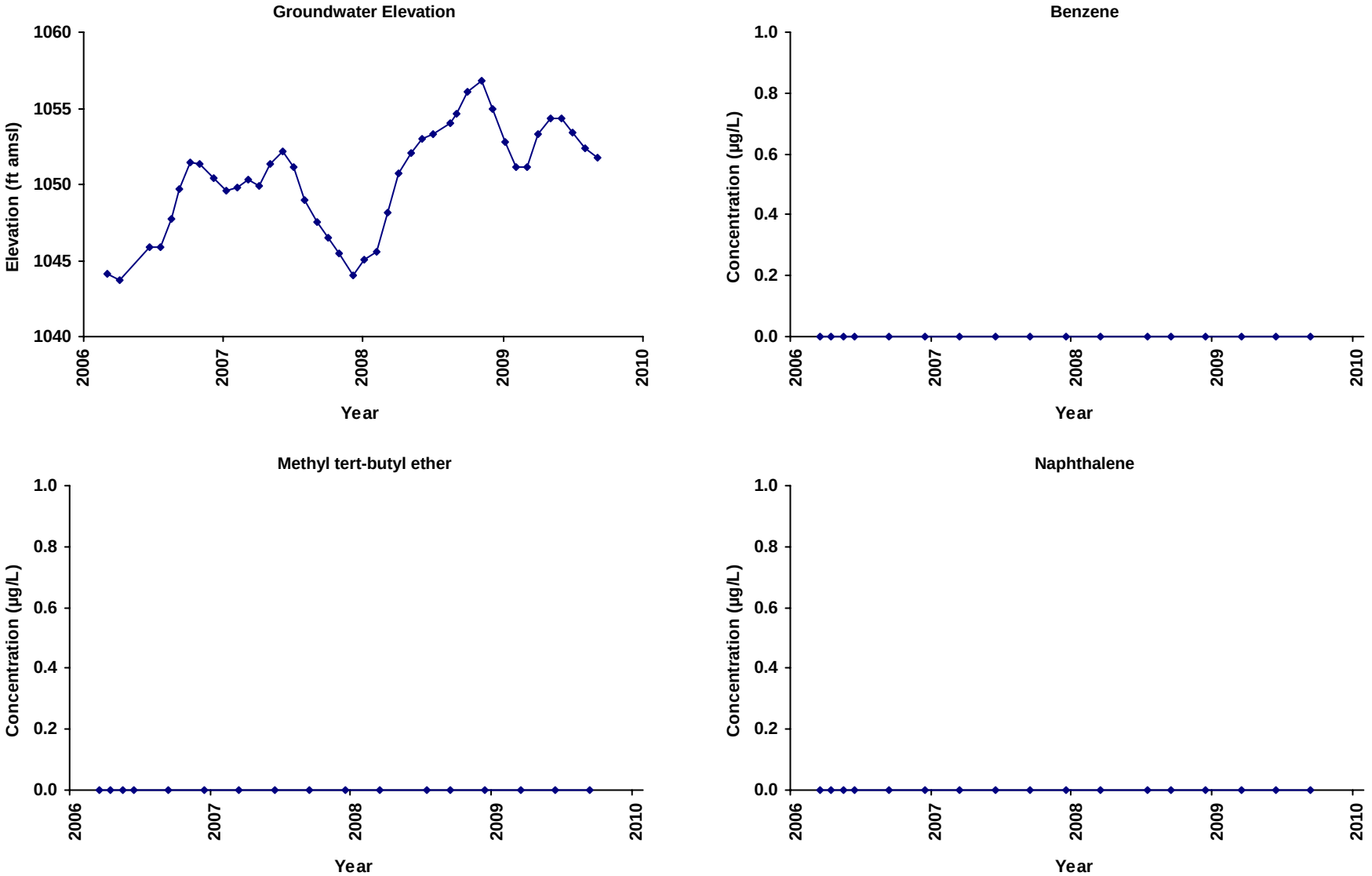
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-40
ASE-116A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

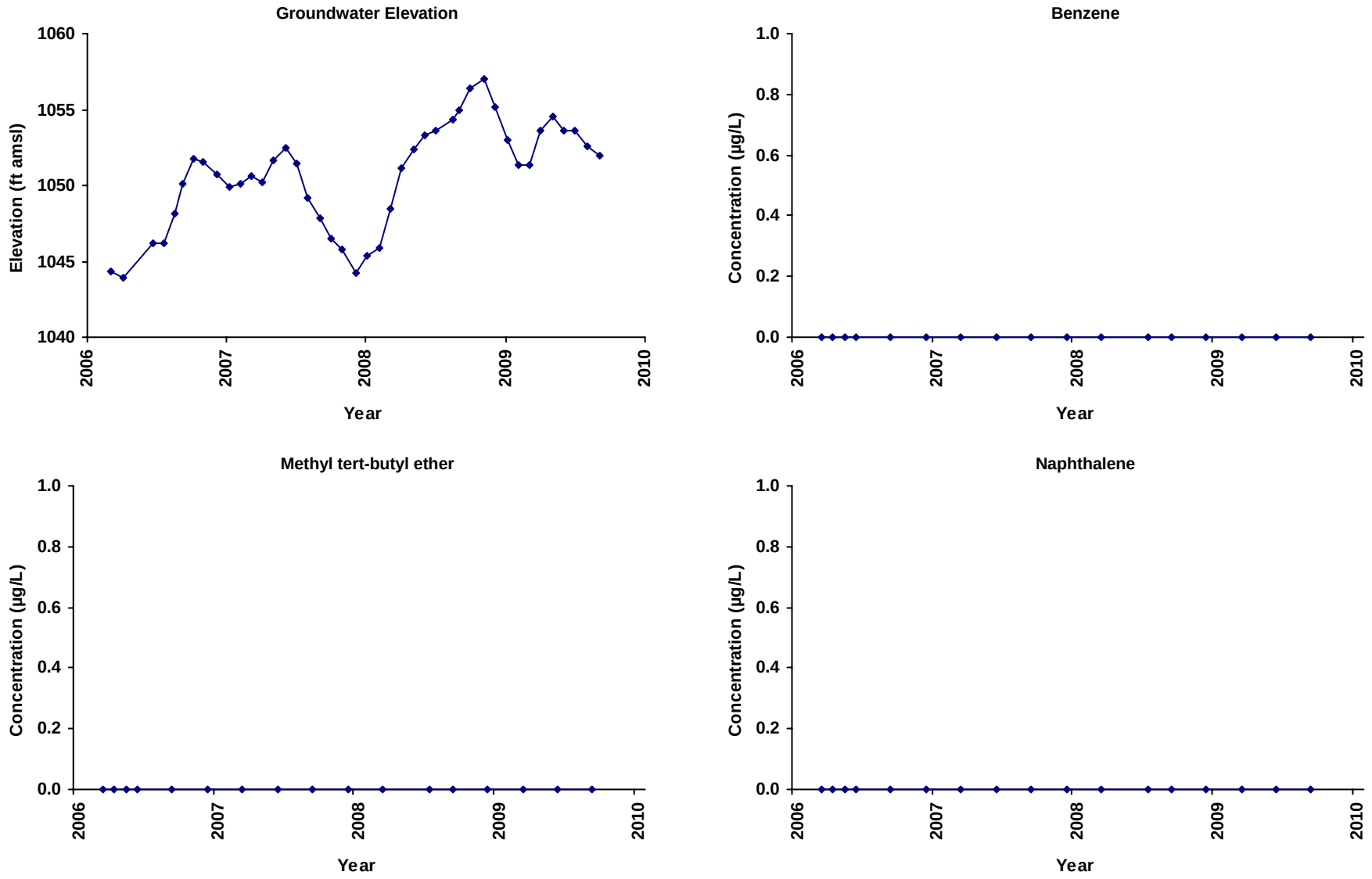
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-41
ASE-122A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

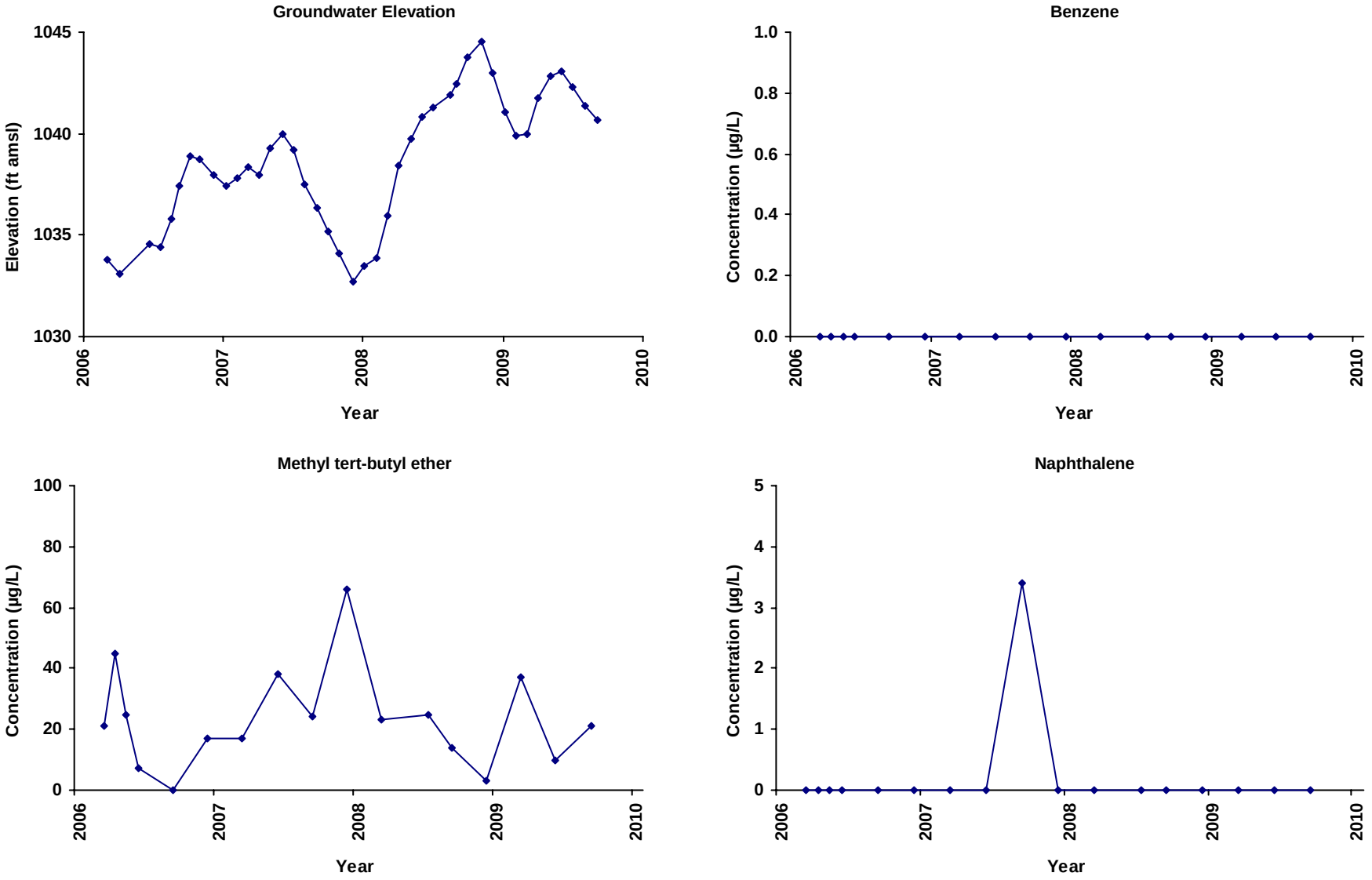
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-42
ASE-123A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

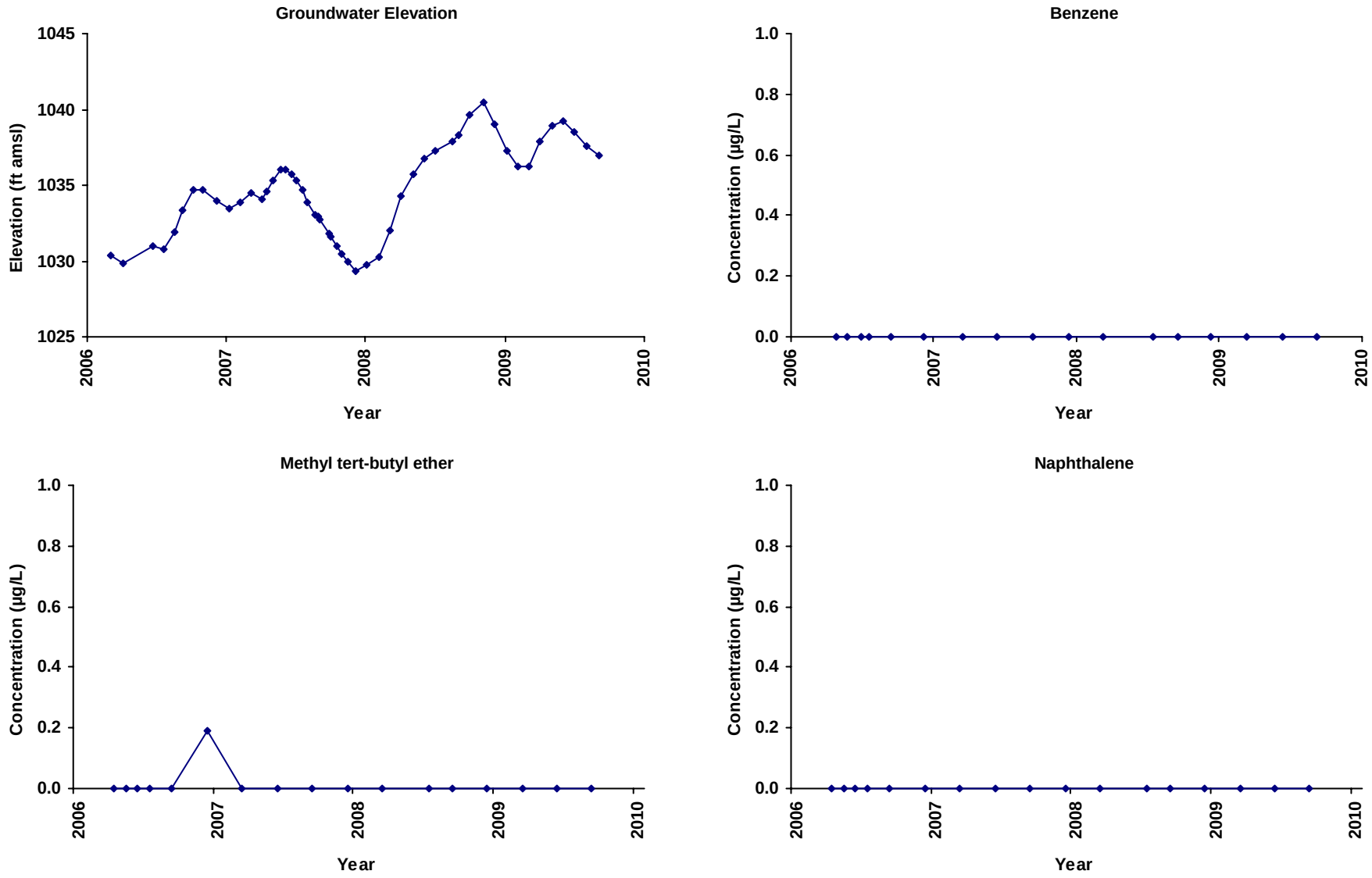
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-43
ASE-124A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

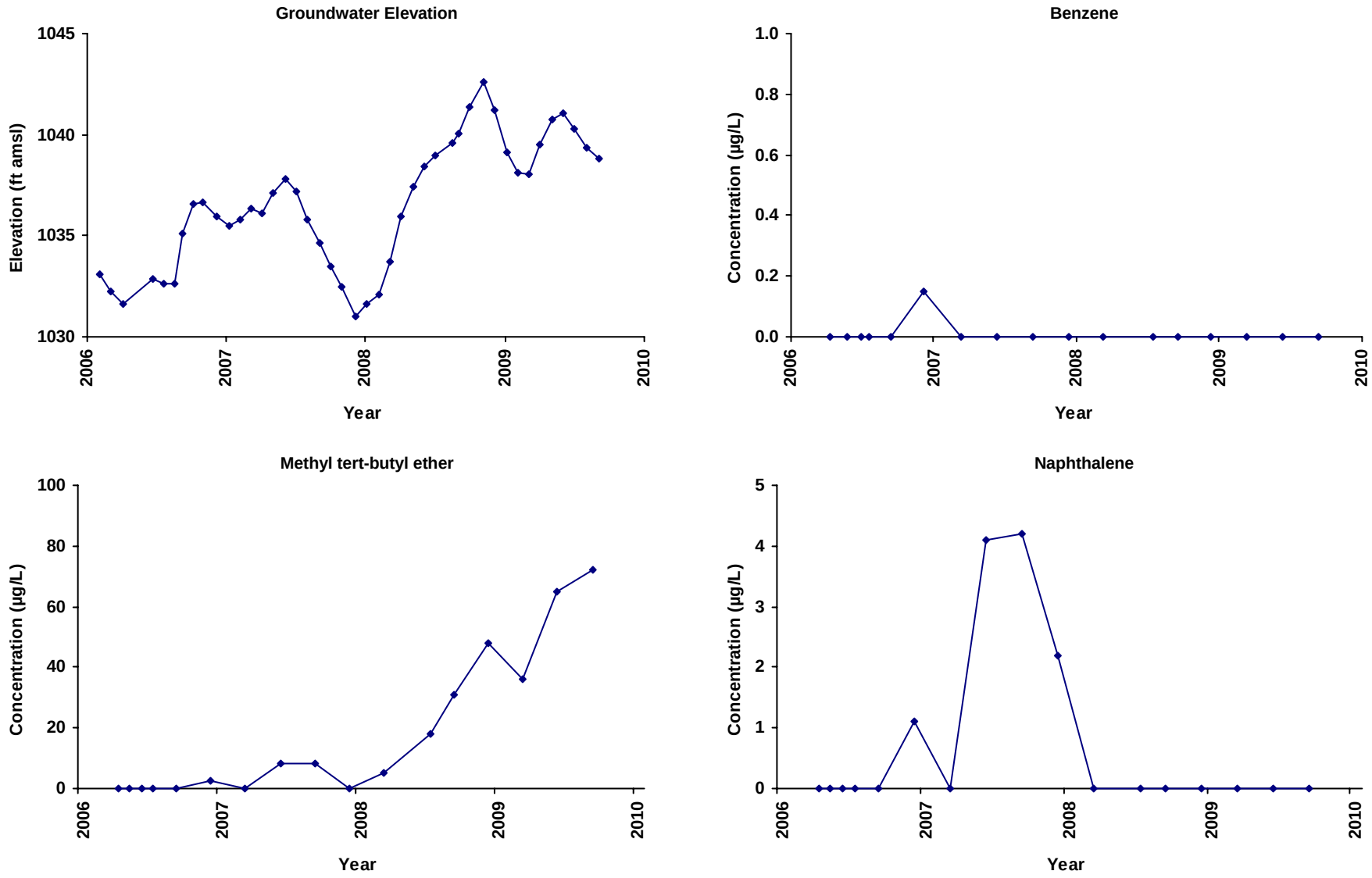
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-44
ASE-125A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

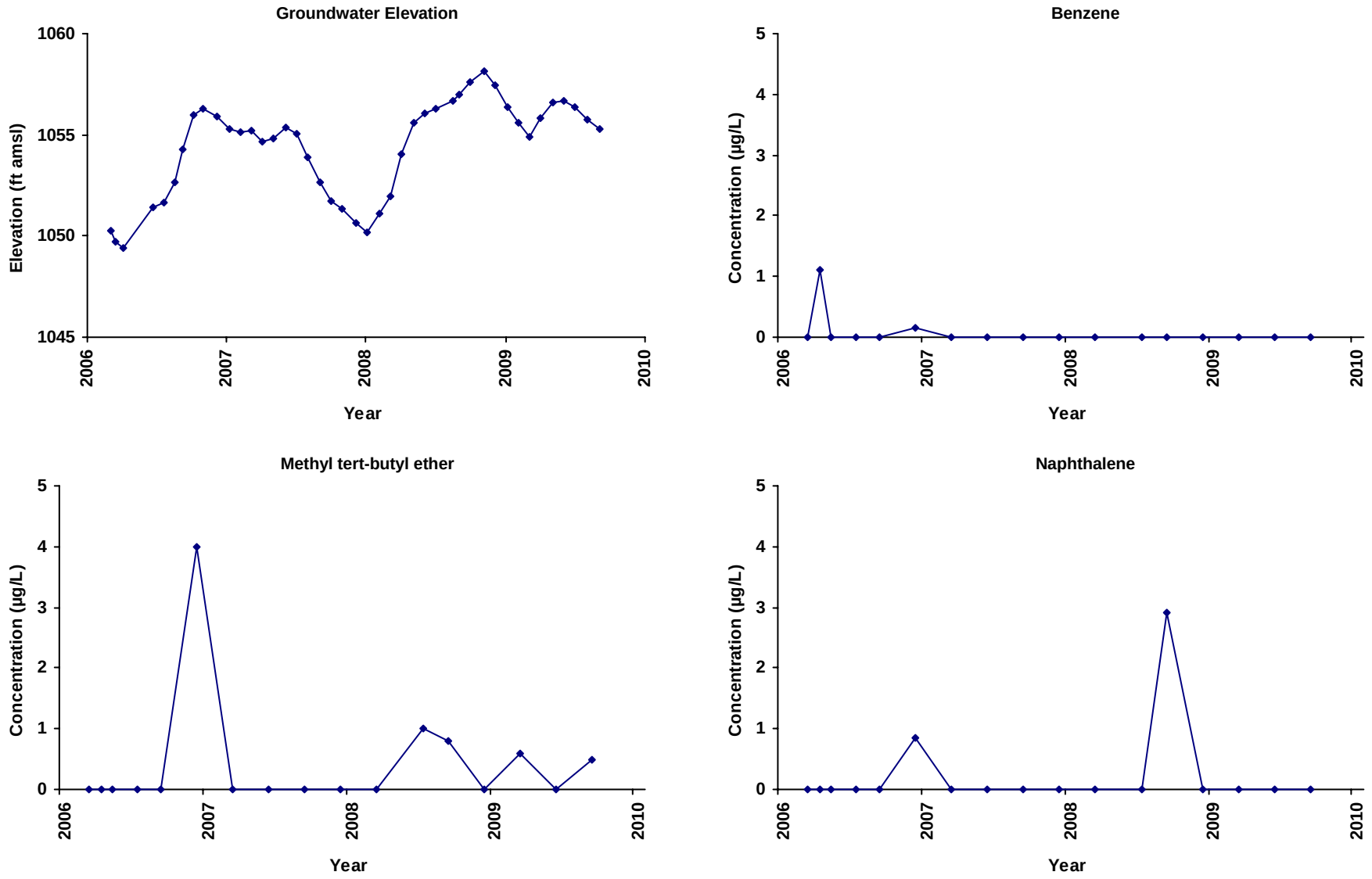
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-45
ASE-126A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

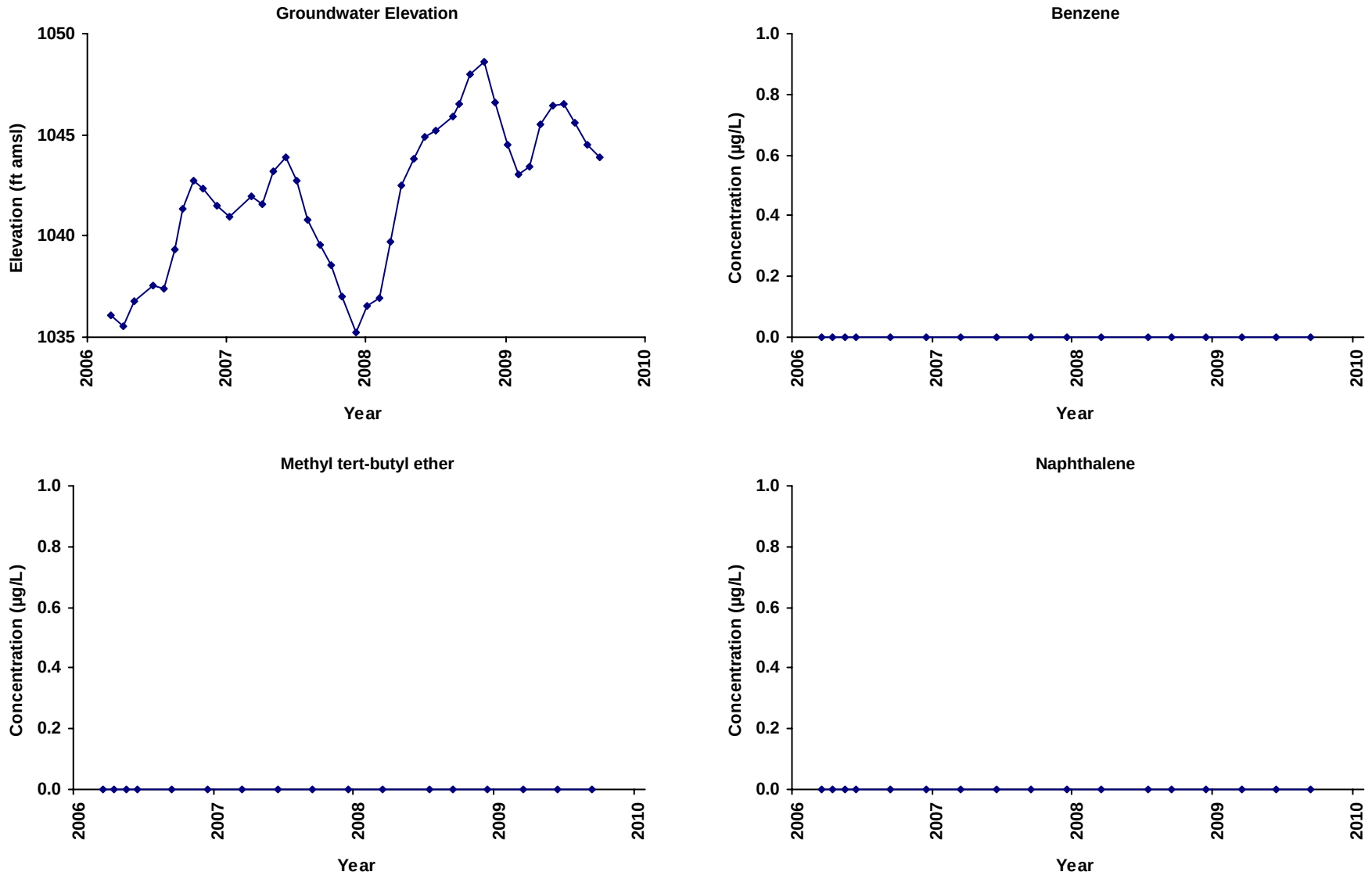
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-46
ASE-127A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

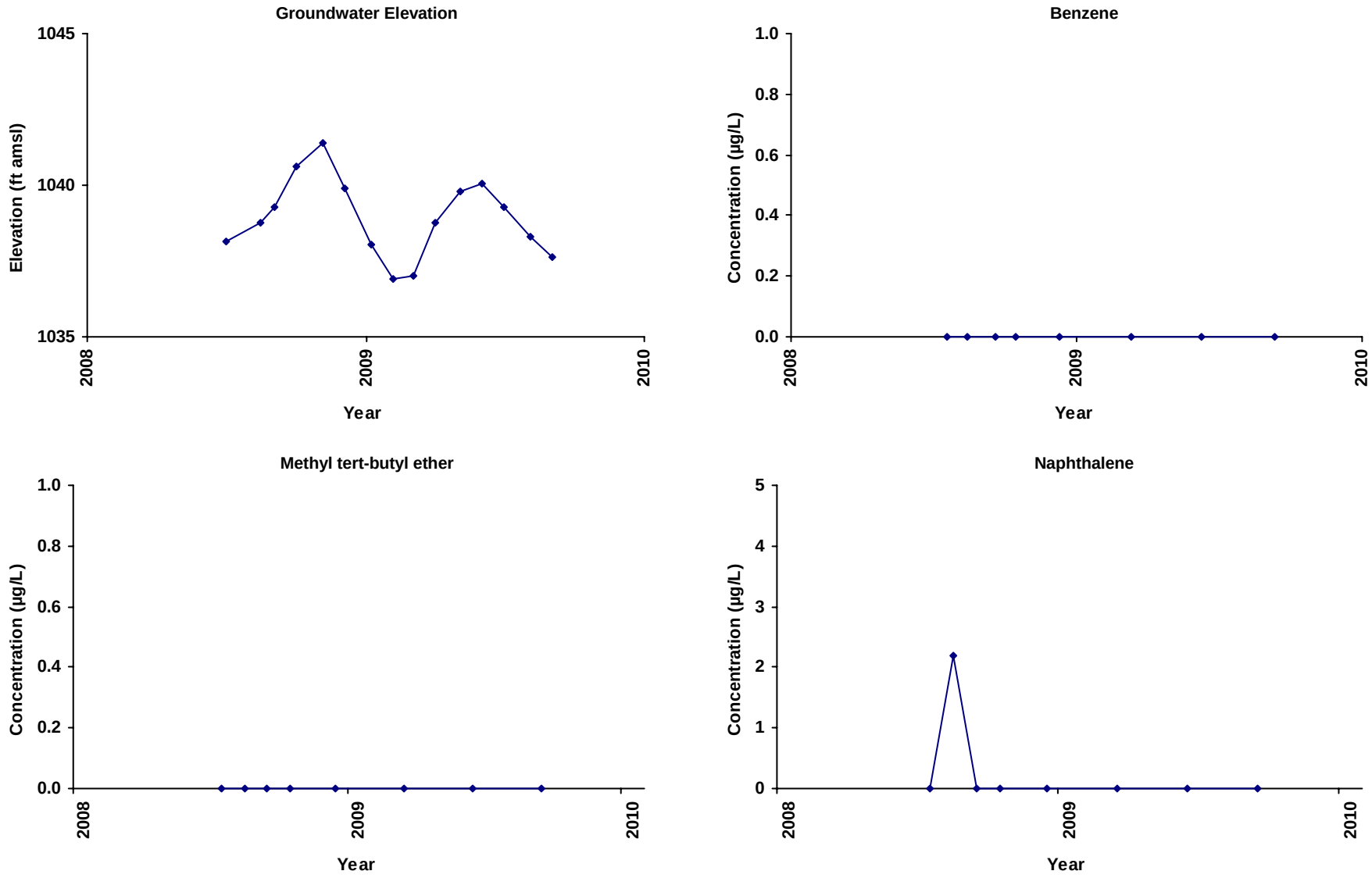
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-47
ASE-128A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

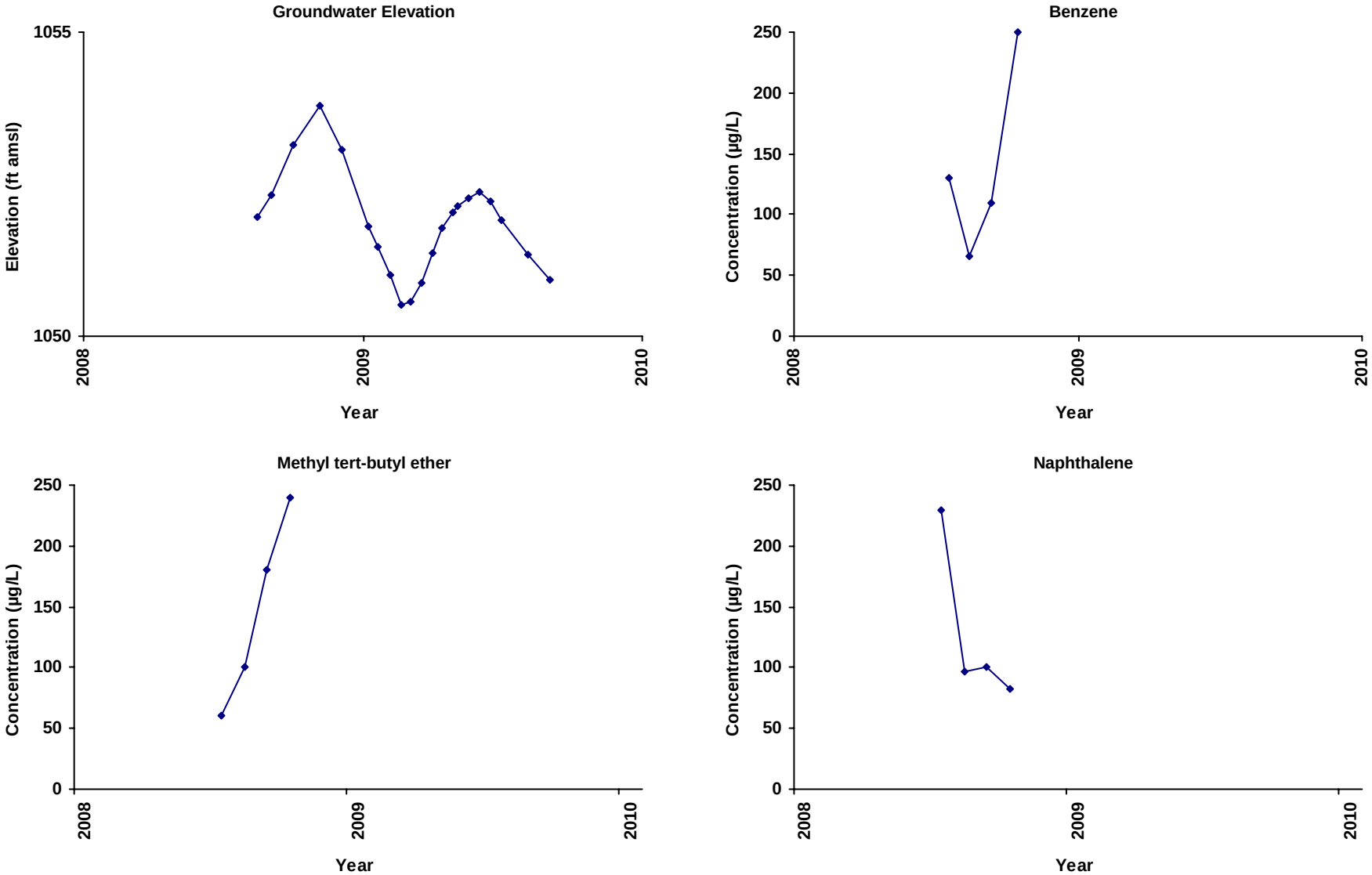
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-48
ASE-129A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

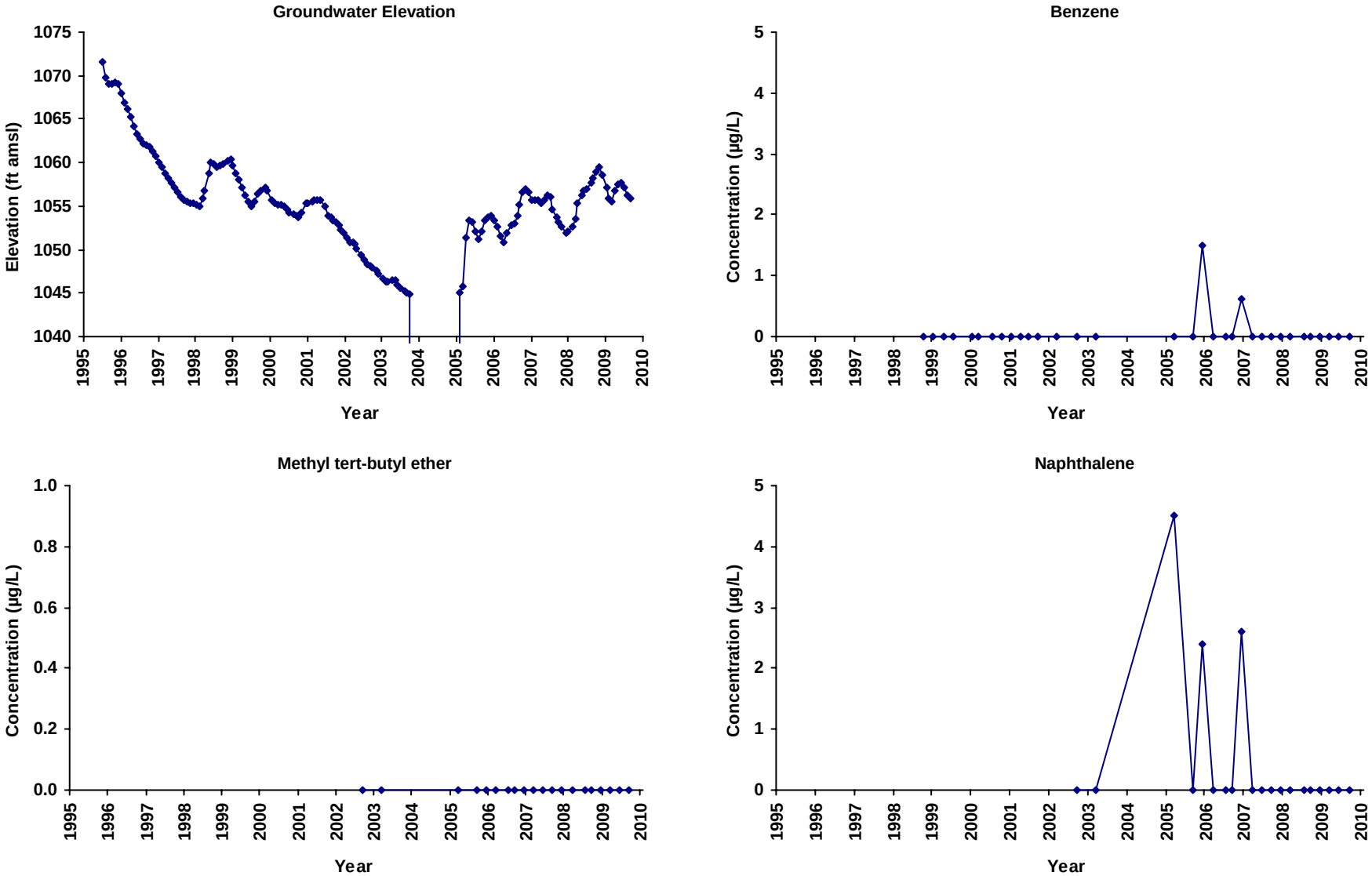
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-49
ASE-130A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

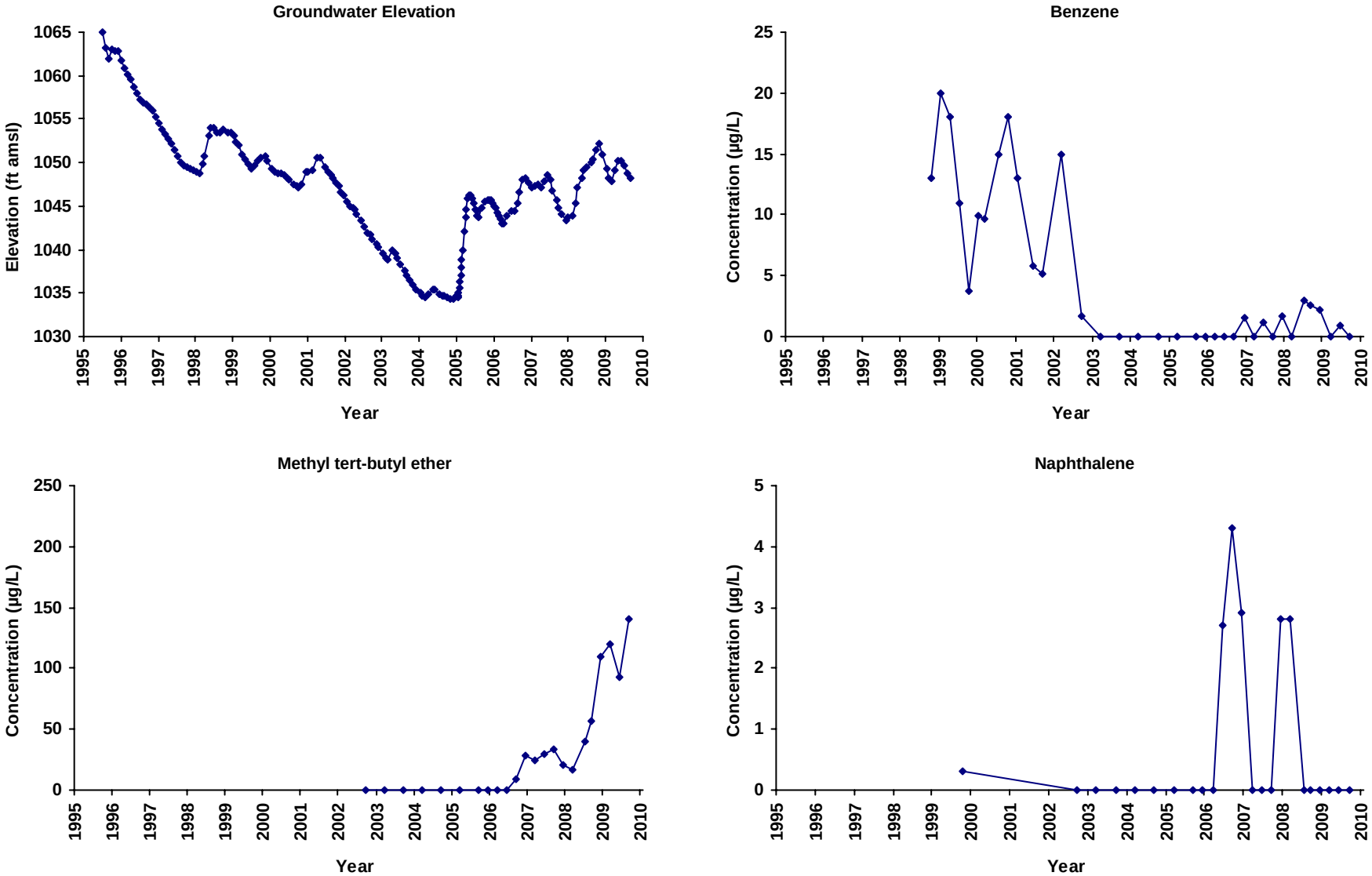
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-50
BC-7A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

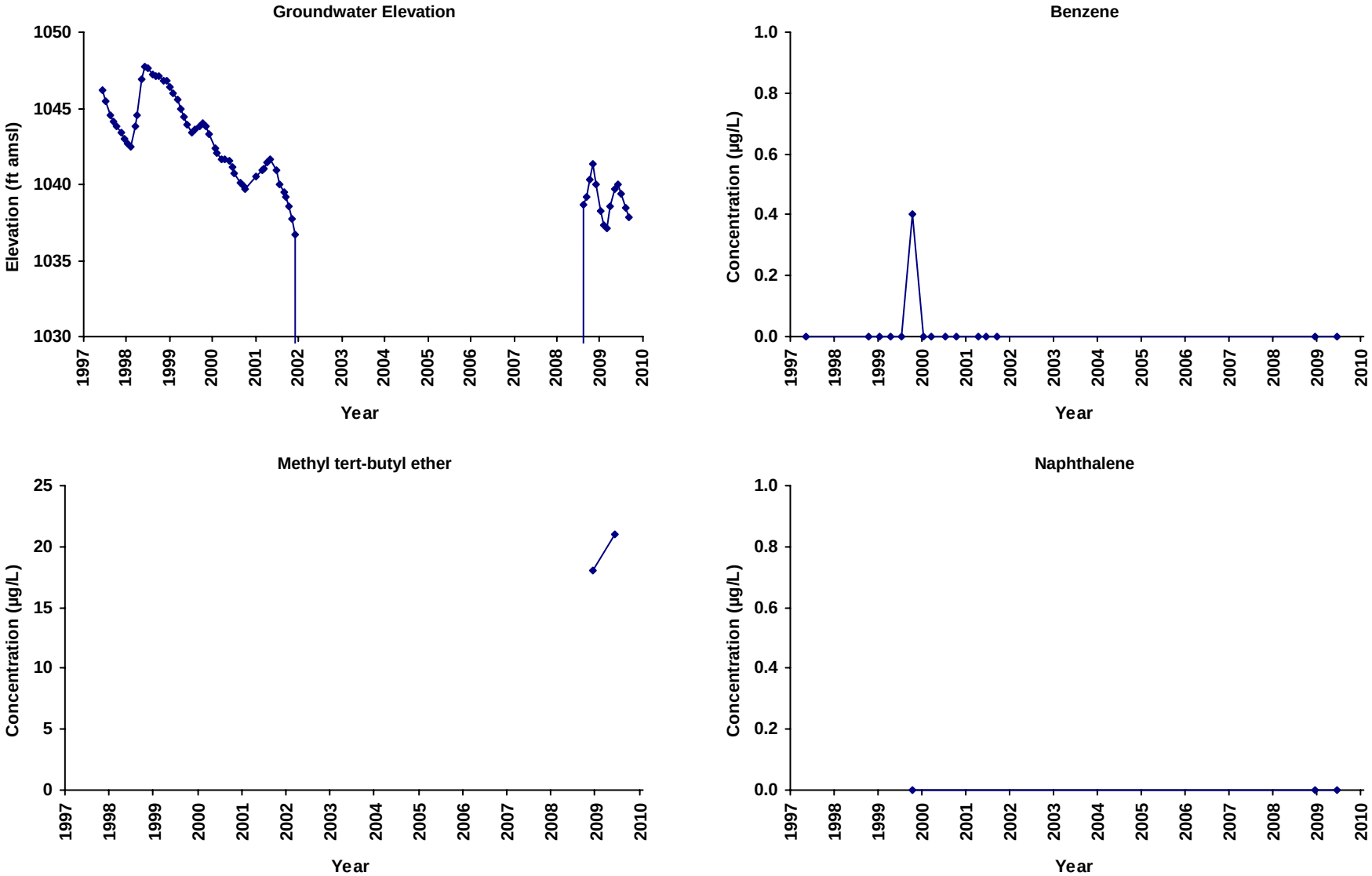
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-51
BC-8B
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

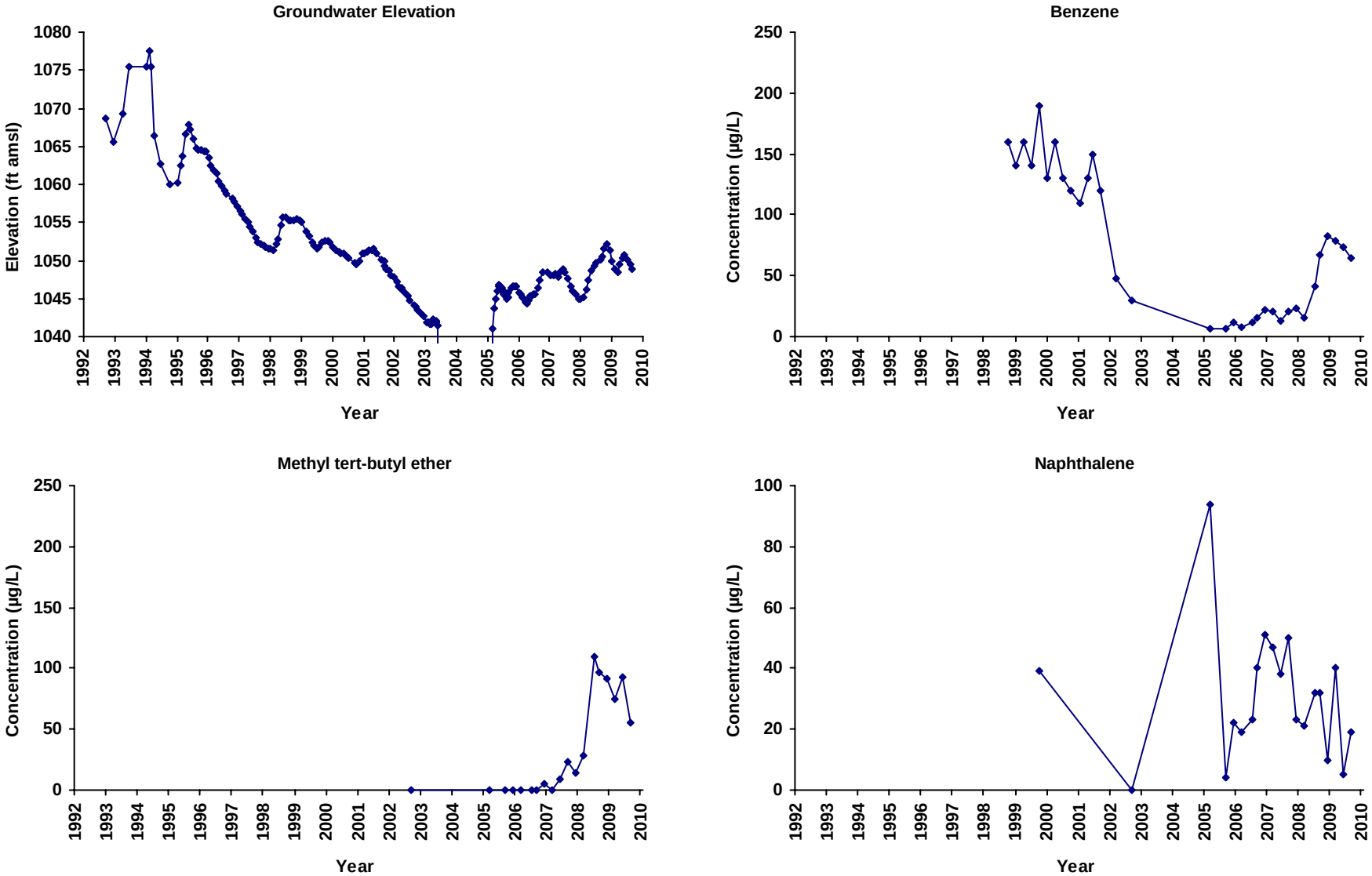
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-52
BC-18
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

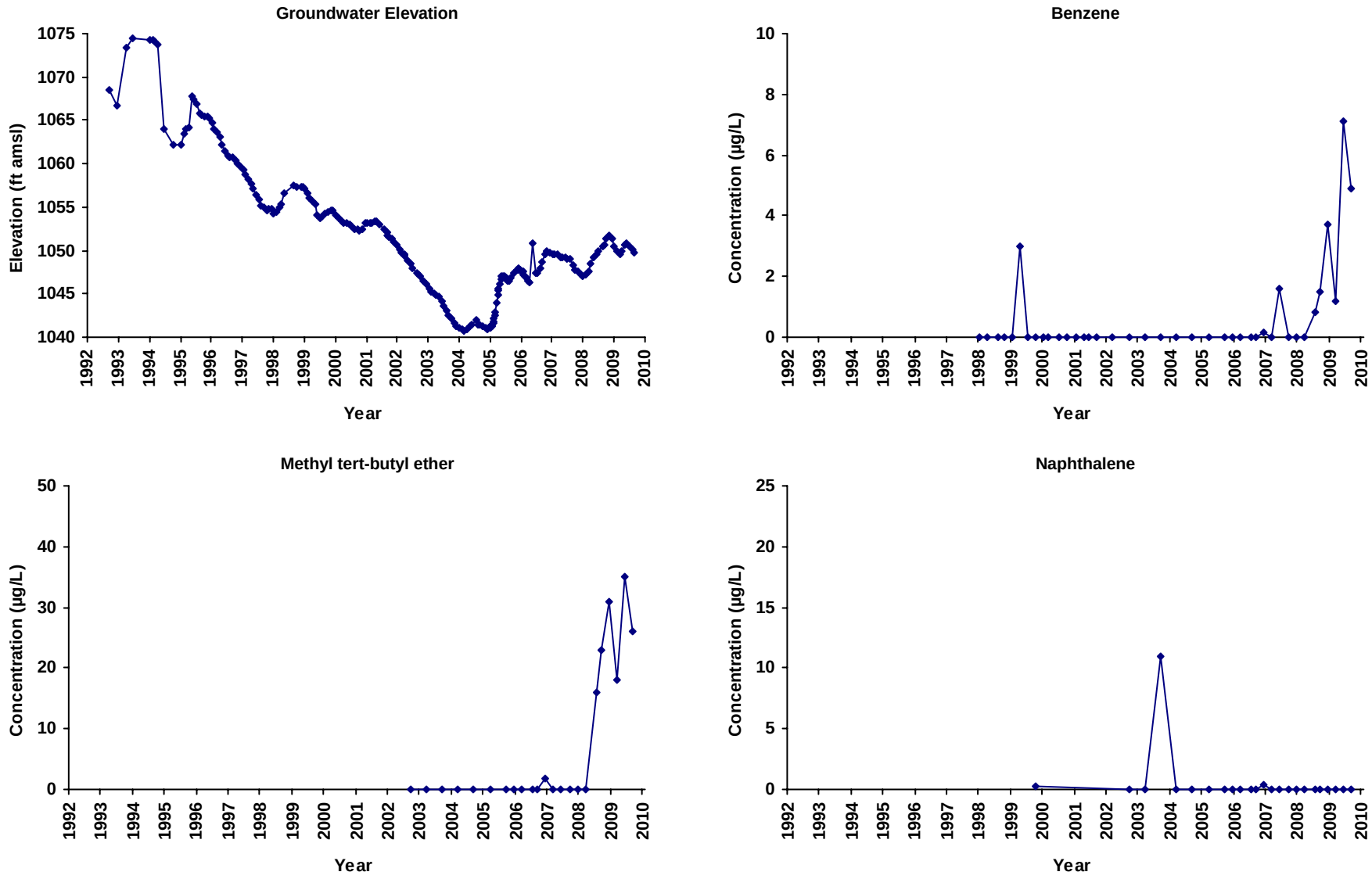
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-53
PL-105A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

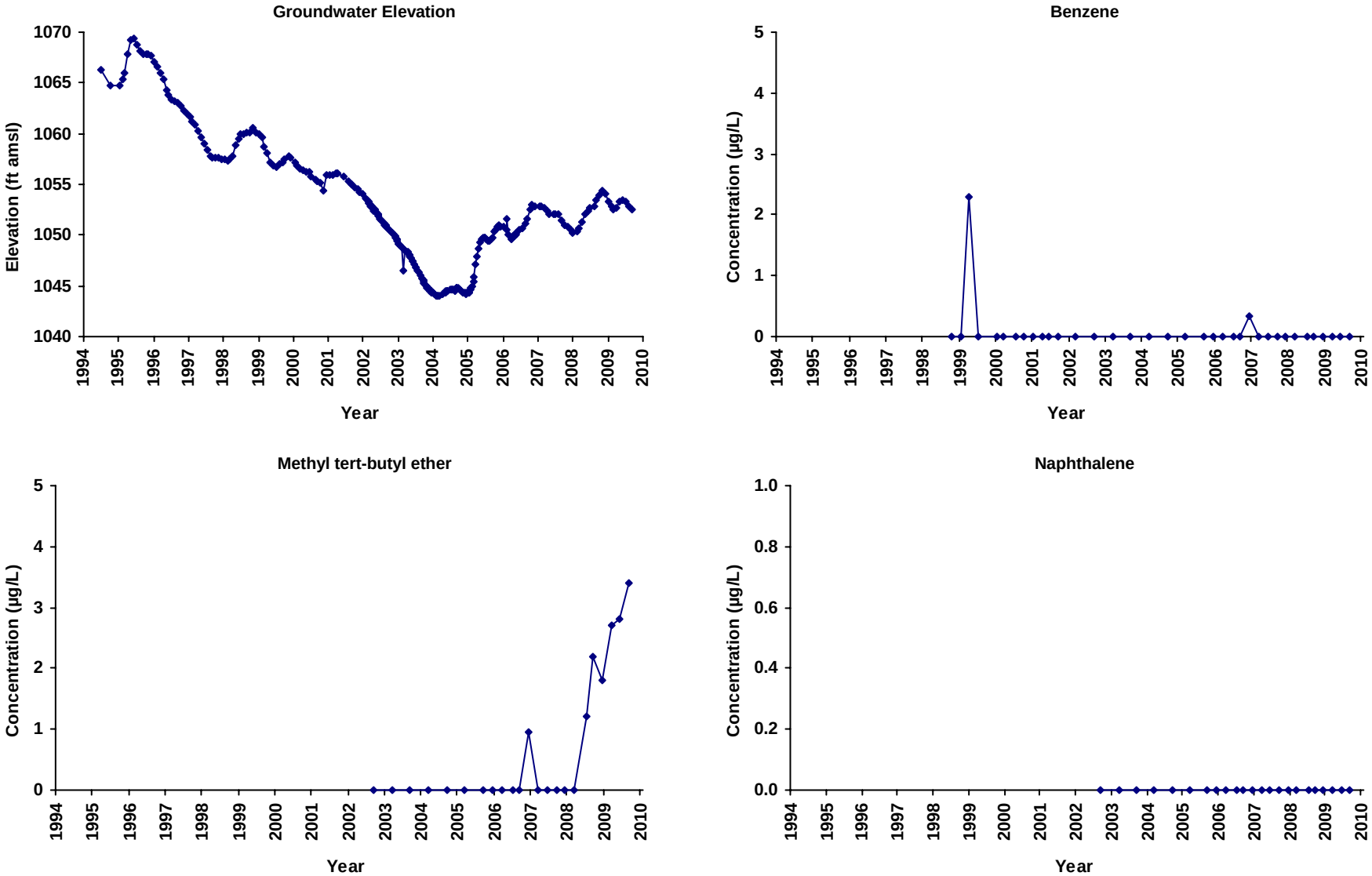
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-54
PL-201A
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

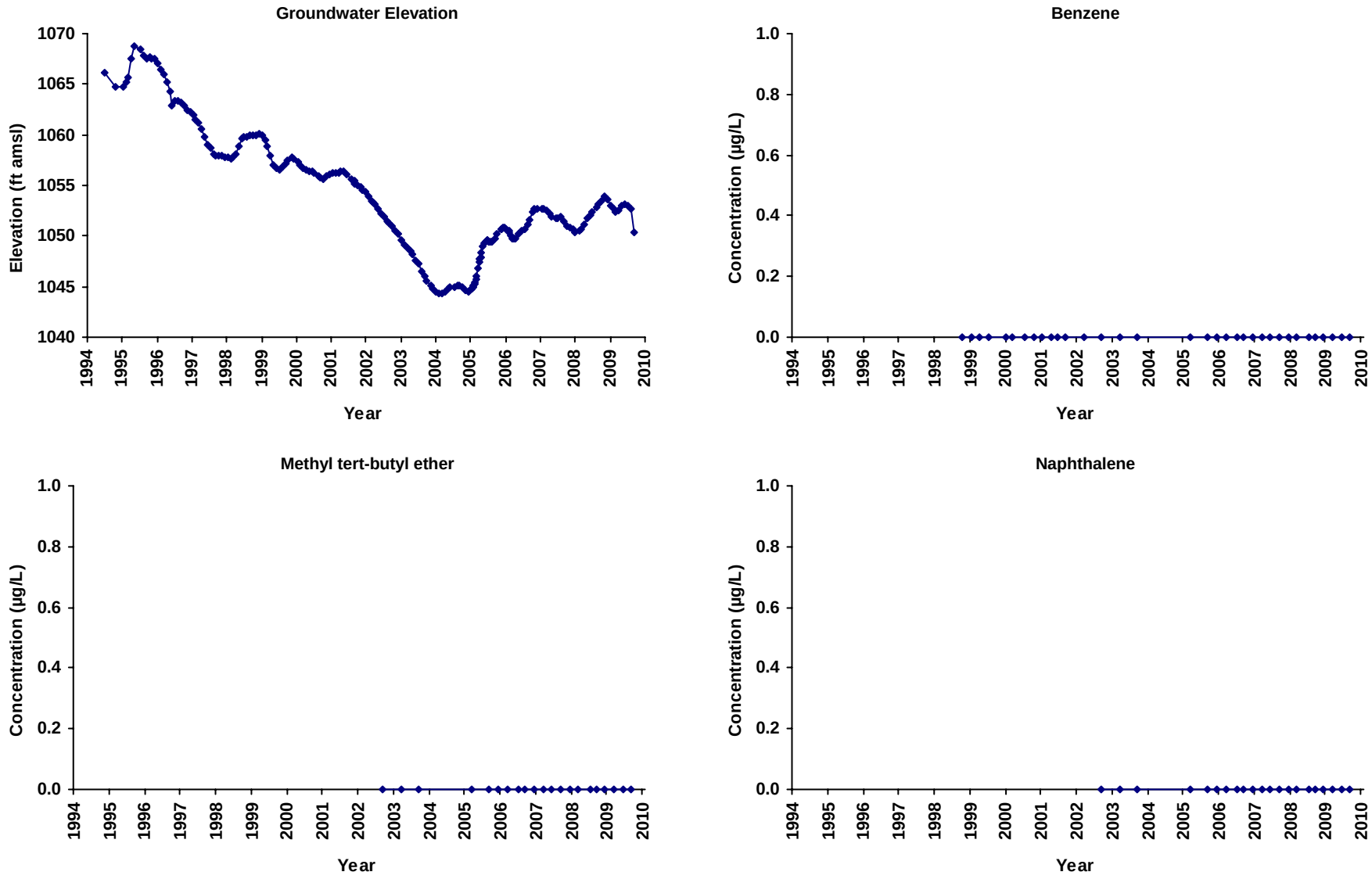
CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-55
PL-2101
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

CH2MHILL



Notes:
Concentrations reported as non-detect are plotted as zero.
ft amsl = feet above mean sea level
µg/L = micrograms per liter

FIGURE D-56
PL-2102
Water Level and Water Quality Hydrographs
Honeywell 34th Street Facility, Phoenix, Arizona

CH2MHILL

Appendix E
Data Quality Evaluation and Laboratory Analytical Reports - Groundwater

APPENDIX E

Data Quality Evaluation Report – Third Quarter 2009 Groundwater Monitoring

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for water samples collected for the Third Quarter 2009 monitoring period at the Honeywell 34th Street facility (Honeywell facility). Samples were collected and analyzed in an effort to continue providing a framework for long-term monitoring of the Honeywell facility. The data may also be used to support future activities such as feasibility studies, risk assessments, fate and transport modeling and remedial actions. The basis for this assessment includes: individual method requirements, guidelines from the United States Environmental Protection Agency (USEPA) *Contract Laboratory National Functional Guidelines for Organic Data Review* (USEPA, 1999), the USEPA *Contract Laboratory National Functional Guidelines for Inorganic Data Review* (USEPA, 2004), and the *Honeywell International Inc., Sky Harbor 34th Street Facility Quality Assurance Project Plan* (QAPP) (CH2M HILL, 2005 and Honeywell, 2006). This DQE report is intended as a general data quality assessment designed to summarize data issues. Note that the Third Quarter 2009 groundwater sampling event, and thus this DQE, includes additional samples and analyses not associated with Honeywell's underground storage tank program.

The Third Quarter 2009 groundwater sampling event was conducted in compliance with the updated QAPP entitled *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* which Honeywell submitted to the Arizona Department of Environmental Quality (ADEQ) on September 20, 2007 (CH2M HILL, 2007). Honeywell is currently awaiting ADEQ's approval of this document.

Analytical Data

This DQE report covers 131 normal samples, 15 field duplicates, 18 equipment blanks, and 18 trip blanks. A list of samples and collection dates is included in Attachment 1 at the end of this report. Samples were collected between September 8 and September 18, 2009. These sample results were reported as 17 sample delivery groups (SDG) listed in Table 1. The analyses were performed by Curtis & Tompkins Laboratory in Berkeley, California (CTBERK) and by TestAmerica Analytical Testing Corporation in Irvine, California (TAMI).

Table 1 – SDGs by Laboratory

SDG Number	Laboratory
214803	CTBERK
214804	CTBERK
214805	CTBERK

Table 1 – SDGs by Laboratory	
SDG Number	**Laboratory**
214846	CTBERK
214850	CTBERK
214851	CTBERK
214922	CTBERK
214923	CTBERK
214924	CTBERK
214925	CTBERK
215063	CTBERK
215064	CTBERK
215065	CTBERK
215071	CTBERK
215072	CTBERK
ISI1338	TAMI
ISI1341	TAMI

Fifteen methods were used to analyze the environmental samples. Samples were collected and shipped by overnight carrier to the laboratories for analysis. Selected samples were analyzed for one or more of the following analytes/methods:

Table 2 – Analytical Parameters by Laboratory		
Parameter	**Method**	**Laboratory**
Volatile Organic Compounds	SW8260B	CTBERK
Total Petroleum Hydrocarbons (diesel and oil range organics)	SW8015B	CTBERK
1,4-Dioxane	SW8270C-SIM	CTBERK
Dissolved Gases (methane, ethane, ethane)	RSK175	TAMI
Silicon	E200.7	TAMI
Total and dissolved metals	SW6010B/SW6020	CTBERK
Total and dissolved mercury	SW7470A	CTBERK
Hexavalent chromium	SW7196A	CTBERK
Ferrous iron	SM3500	TAMI
Anions (chloride, fluoride, nitrate, sulfate)	E300.0	CTBERK
Alkalinity	E310.1	CTBERK
Total organic carbon	SM5310B	TAMI
Chemical oxygen demand	E410.1	TAMI
Total dissolved solids	SM2540C	TAMI

Data validation was performed in accordance with the *Contract Laboratory National Functional Guidelines for Organic Data Review* (USEPA, 1999) and the *Contract Laboratory National Functional Guidelines for Inorganic Data Review* (USEPA, 2004), substituting the calibration and quality control requirements specified in the Honeywell QAPP (CH2M HILL, 2005 and Honeywell, 2006; CH2M HILL, 2007) for those specified in the National Functional Guidelines.

The assessment of data includes a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required field and laboratory quality control samples; (4) flagging for method blanks; (5) laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries; (6) surrogate spike recoveries; (7) matrix spike/matrix spike duplicate samples (MS/MSD); (8) internal standard responses; and (9) initial and continuing calibrations.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of field duplicates, equipment blanks, and trip blanks.

Data flags are assigned according to the Honeywell QAPP (CH2M HILL, 2005 and Honeywell, 2006; CH2M HILL, 2007). These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes matrix and blank sample impacts.

The data flags are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = The result was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Table 7 at the end of this DQE. Both the text section and Table 7 contain only the instances where criteria exceedances impact data qualification (resulting in a validation flag being added to the data).

Holding Times

All holding-time criteria were met with the following exceptions:

Samples PL-201A-9C1, ASE-65A-9C1 ASE-23B-9C1 and ASE-22B-9C1 were analyzed outside of holding time by approximately 12 hours for Method SW7196A. The samples were received at the laboratory outside of holding time. Sample results are possibly biased low.

Three non-detected results were qualified as estimated and flagged "UJ"; one detected result was qualified as estimated and flagged "J".

Samples PL-520-9C1, PL-201A-9C1, BC-17-9C1, ASE-85A-9C1, ASE-76B-9C1, ASE-73A-9C1, ASE-70A-9C1, ASE-65A-9C1, ASE-60A-9C1, ASE-23B-9C1, and ASE-22B-9C1 were analyzed outside of holding time by approximately 30 hours for Method SM3500D. The samples were received at the laboratory outside of holding time. Sample results are possibly biased low. Nine non-detected results were qualified as estimated and flagged "UJ"; two detected results were qualified as estimated and flagged "J".

Sample Quantitation

All methods were reported to the reporting limit (RL). For methods included in the Honeywell QAPP, all Honeywell QAPP objectives were met for undiluted analyses with the exceptions listed in Table 3.

Table 3 – QAPP Reporting Limit Objectives Not Met for all Samples

Method	Analyte	QAPP RL (ug/L)	Report RL (ug/L)	Comments
SW8260B	Methylene Chloride	5	10	Laboratory RL submitted as a variance to the Honeywell QAPP. Variance was accepted by the CH2M HILL chemist.
SW8015B	Total Petroleum Hydrocarbons - Diesel Range Organics (C_{10}-C_{22})	50	1000	Laboratory RL raised per client request
SW8015B	Total Petroleum Hydrocarbons - Oil Range Organics (C_{22}-C_{32})	50	1000	Laboratory RL raised per client request

Several methods were performed that are not included in the Honeywell QAPP. For these methods/analytes, laboratory standard RLs and laboratory established quality control criteria were used to evaluate the precision and accuracy of the data. Table 4 presents the methods and analytes not included in the Honeywell QAPP. Where a maximum contaminant level exists for these additional analytes, the laboratory RL was equal to or below the maximum contaminant level.

Table 4 – Methods/Analytes not Included in Honeywell QAPP

Method	Analyte	Laboratory RL (mg/L)	Maximum Contaminant Level (mg/L)
E200.7	Silicon	0.05	NA
E310.1	Alkalinity	1	NA
E410.4	Chemical oxygen demand	20	NA
SM3500	Ferrous iron	0.1	NA
SM5310B	Total organic carbon	1	NA
SW6010B	Boron	0.1	NA
SW6020	Aluminum	0.05	0.05*
SW6020	Antimony	0.001	0.006
SW6020	Calcium	0.05	NA
SW6020	Magnesium	0.05	NA
SW6020	Potassium	0.05	NA

Table 4 – Methods/Analytes not Included in Honeywell QAPP			
Method	**Analyte**	**Laboratory RL (mg/L)**	**Maximum Contaminant Level (mg/L)**
SW6020	Sodium	0.05	NA
SW6020	Thallium	0.001	0.002
SW6020	Zinc	0.005	5*

*no Maximum Contaminant Level exists, value is a National Secondary Drinking Water Regulation

Sample Dilutions

Several samples required dilution due to high analyte concentrations and/or matrix interference. The RLs for non-detected analytes in the diluted samples were raised accordingly. Table 5 lists the methods and samples analyzed at a dilution.

Table 5 – Samples Analyzed Diluted		
Method	**Sample ID**	**Dilution Factor**
E300.0	ASE-22B-9C1	5, 25
E300.0	ASE-23B-9C1	10, 25
E300.0	ASE-49B-9C1	2, 25
E300.0	ASE-60A-9C1	5, 25
E300.0	ASE-65A-9C1	10, 25
E300.0	ASE-70A-9C1	10, 25
E300.0	ASE-72B-9C1	2, 10, 25
E300.0	ASE-73A-9C1	5, 25
E300.0	ASE-76B-9C1	10, 25
E300.0	ASE-85A-9C1	5, 25
E300.0	BC-17-9C1	10, 25
E300.0	PL-201A-9C1	25
E300.0	PL-520-9C1	10, 25
E300.0	PZ-1B-9C1	5, 25
E310.1	ASE-22B-9C1	6.7
E310.1	ASE-23B-9C1	6.7
E310.1	ASE-49B-9C1	6.7
E310.1	ASE-60A-9C1	6.7
E310.1	ASE-65A-9C1	6.7
E310.1	ASE-70A-9C1	6.7
E310.1	ASE-72B-9C1	6.7
E310.1	ASE-73A-9C1	6.7
E310.1	ASE-76B-9C1	6.7
E310.1	ASE-85A-9C1	6.7
E310.1	BC-17-9C1	6.7
E310.1	PL-201A-9C1	6.7
E310.1	PL-520-9C1	6.7
E310.1	PZ-1B-9C1	6.7
SW6020	ASE-22B-9C1	5, 50
SW6020	ASE-23B-9C1	5, 50
SW6020	ASE-49B-9C1	5, 50

Table 5 – Samples Analyzed Diluted		
Method	**Sample ID**	**Dilution Factor**
SW6020	ASE-60A-9C1	5, 50
SW6020	ASE-65A-9C1	5, 50
SW6020	ASE-70A-9C1	5, 50
SW6020	ASE-72B-9C1	5, 50
SW6020	ASE-73A-9C1	5, 50
SW6020	ASE-76B-9C1	5, 50
SW6020	ASE-85A-9C1	5, 50
SW6020	BC-10A-9C1	5
SW6020	BC-17-9C1	5, 50
SW6020	PL-102A-9C1	5
SW6020	PL-201A-9C1	5, 50
SW6020	PL-520-9C1	5, 50
SW6020	PZ-1B-9C1	5, 50
SW8260B	ASE-116A-9C1	3.333
SW8260B	ASE-22B-9C1	4
SW8260B	ASE-38A-9C1	10
SW8260B	ASE-63A-9C1	50
SW8260B	ASE-72B-9C1	4
SW8260B	ASE-76B-9C1	2.5
SW8260B	ASE-85B-9C1	2
SW8260B	ASE-92A-9C1	4
SW8260B	BC-11A-9C1	2
SW8260B	BC-8B-9C1	2
SW8260B	PL-103C-9C1	2
SW8260B	PL-202N-9C1	2
SW8260B	PL-517-9C1	5
SW8260B	PL-526-9C1	3.333
SW8260B	PL-528-9C1	5
SW8260B	PZ-1B-9C1	4
SW8270C-SIM	PL-201A-9C1	25

Calibration

The relative standard deviation of vinyl acetate was above criteria in one initial calibration for Method SW8260B, indicating associated results are possibly biased. Twenty associated non-detected results were qualified as estimated and flagged “UJ”.

The recoveries of sec-butylbenzene and chloroethane were above criteria in the initial calibration verifications for Method SW8260B, indicating associated sample results are possibly biased high. Two associated detected results were qualified as estimated and flagged “J”.

The recovery of vinyl acetate was below criteria in the initial calibration verifications for Method SW8260B, indicating associated sample results are possibly biased low. Two associated non-detected results were qualified as estimated and flagged “UJ”.

The recoveries of 2-hexanone, 4-methyl-2-pentanone, bromomethane, hexachlorobutadiene, iodomethane and tert-butylbenzene were below criteria in the continuing calibration verifications for Method SW8260B, indicating associated sample results are possibly biased low. One hundred thirty-eight associated non-detected results were qualified as estimated and flagged "UJ".

Method Blanks

Method blanks were analyzed at the required frequency and were generally free of contamination.

Calcium was detected above the RL in a method blank for Method SW6020. Associated results were not affected because the samples contained concentrations of calcium greater than five times the concentration detected in the method blank.

Naphthalene was detected above the RL in a method blank for Method SW8260B. Associated results were not affected because the samples did not contain reportable levels of naphthalene.

Field Blanks

Equipment blanks and trip blanks were collected as required and were generally free of contamination.

Chloroform was detected above the RL in an equipment blank for Method SW8260B. Two associated samples were detected less than five times the blank concentration. The results were qualified as not detected and flagged "U".

Acetone, toluene, dibromochloromethane, and bromodichloromethane were detected above the RL in the equipment blanks for Method SW8260B. Associated results were not affected because the samples did not contain reportable levels of these analytes.

Field Duplicates

Fifteen field duplicate sets were collected and analyzed with this event. A list of field duplicates and associated parent sample identifications (ID) is included in Table 6.

Table 6– List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
PL-503-9C1	ASE-10C-9C1
PL-504-9C1	ASE-20C-9C1
PL-505-9C1	ASE-128A-9C1
PL-508-9C1	ASE-43B-9C1
PL-509-9C1	ASE-124A-9C1
PL-512-9C1	ASE-33A-9C1
PL-513-9C1	ASE-84A-9C1
PL-516-9C1	BC-14-9C1
PL-517-9C1	PL-202N9C1
PL-520-9C1	ASE-70A-9C1
PL-523-9C1	ASE-24C-9C1

Table 6– List of Field Duplicates	
Field Duplicate Sample ID	**Associated Parent Sample ID**
PL-525-9C1	ASE-83B-9C1
PL-526-9C1	ASE-85B-9C1
PL-528-9C1	ASE-72B-9C1
PL-531-9C1	ASE-64A-9C1

All relative percent difference (RPD) criteria were met with the following exceptions:

The RPD of 1,1-dichloroethene was above the acceptance criterion in field duplicate set PL-202N-9C1/PL-517-9C1 for Method SW8260B. The detected results in the normal and duplicate were qualified as estimated and flagged "J".

Surrogates

All surrogates recovery criteria were met with the following exceptions:

Surrogates were recovered above criteria in the following samples for Method SW8260B: ASE-126A-9C1, ASE-48B-9C1, ASE-58A-9C1, ASE-61A-9C1, ASE-75A-9C1, ASE-75B-9C1, ASE-96A-9C1, ASE-97A-9C1, ASE-98A-9C1, BC-2-9C1, PL-102A-9C1, PL-105A-9C1, and PL-2103-9C1. Associated samples results are possibly biased high. Forty-eight associated detected results were qualified as estimated and flagged "J".

Laboratory Control Samples

LCS/LCSDs were analyzed for Methods SW6010B, SW6020, SW7470A, SW8015B and SW8260B. LCSs were analyzed for Methods E200.7, E300.0, E310.1, E410.4, RSK175, SM2540C, SM3500, SM5310B and SW7196A. Precision and accuracy criteria were met with the following exceptions:

The recovery of naphthalene was above criteria in a LCS for Method SW8260B, indicating associated results are possibly biased high. Five associated detected results were qualified as estimated and flagged "J".

The recoveries of iodomethane and vinyl acetate were below criteria in the LCSs for Method SW8260B, indicating associated results are possibly biased low. Seventeen associated non-detected results were qualified as estimated and flagged "UJ".

Matrix Spikes

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. MS/MSD recoveries and the associated RPD met criteria with the following exceptions:

The recovery of calcium was below criteria in the MS and MSD of sample ASE-65A-9C1 for Method SW6020, indicating the associated parent sample result is possibly biased low. The detected result in the parent sample was qualified as estimated and flagged "J".

The recovery of hexavalent chromium was below criteria in the MS and MSD of sample ASE-23B-9C1 for Method SW7196A, indicating the associated parent sample result is

possibly biased low. The non-detected result in the parent sample was qualified as estimated and flagged “UJ”.

The recovery of trichloroethene was below criteria in the MSD of sample ASE-73C-9C1 for Method SW8260B. Additionally, the recoveries of sec-butylbenzene and benzene were below criteria in the MSD of sample ASE-108A-9C1. Associated parent sample results are possibly biased low. Three detected parent sample results were qualified as estimated and flagged “J”.

The recovery of tetrachloroethene was above criteria in the MS of sample ASE-73C-9C1 for Method SW8260B. Additionally, the recoveries of vinyl chloride, methyl tert-butyl ether, cis-1,2-dichloroethene and 1,1dichloroethene were above criteria in the MS of sample ASE-46B-9C1, and the recoveries of 1,1,1-trichloroethane and n-butylbenzene were above criteria in the MS and/or MSD of sample ASE-108A-9C1. Associated parent sample results are possibly biased high. Seven detected parent sample results were qualified as estimated and flagged “J”.

Post-Digestion Spikes

All post-digestion spike criteria were met.

Serial Dilutions

The SW6020 serial dilution RPDs were above the acceptance criteria for potassium in sample ASE-65A-9C1 and for manganese in sample ASE-72B-9C1, indicating the associated sample results are possibly biased. Two associated detected results were qualified as estimated and flagged “J”.

Total and Dissolved Metals

The total iron concentration was less than the dissolved iron concentration in sample ASE-72B-9C1 for Method SW6020. Additionally, the total manganese concentration was less than the dissolved manganese concentration in sample ASE-49B-9C1. The RPDs between the total and dissolved concentrations was above the acceptance criterion. This indicates possible contamination during filtration for dissolved metals. Three detected results were qualified as estimated and flagged “J”; one non-detected result was qualified as estimated and flagged “UJ”.

Internal Standards

All internal standard criteria were met.

Tentatively Identified Compounds

Tentatively identified compounds were not reported by the laboratory.

Chain of Custody

Each sample was documented in a completed chain-of-custody and received at the laboratory within temperature criteria. Instances where discrepancies in sample integrity were noted are described below.

There were several instances where trip blanks were received with air bubbles. The trip blanks did not contain contamination and data were not affected.

Samples ASE-37A-9C1, ASE-95A-9C1, ASE-125A-9C1, ASE-124A-9C1 and ASE-106A-9C1 were received at the laboratory with one or two of the volatile organic sample containers broken. The laboratory analyzed the volatile organics from the remaining intact containers and data were not affected.

Sample ASE-46B-9C1 was received at the laboratory with the wrong sample identification documented on the chain of custody. This was noted in the sample receipt confirmation from the laboratory. An amended chain of custody was submitted to the laboratory on September 18, 2009 with the correct sample identification.

Overall Assessment

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The procedures for assessing the precision, accuracy, representativeness, completeness, and comparability parameters were based on the Honeywell QAPP. The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for the above-defined events:

1. No data were rejected and completeness was 100 percent for all method/analyte combinations.
2. Less than one percent of the SW8260B data were qualified due to low-level field blank contamination. The degree to which blank contamination was observed is within reasonable method expectations.
3. Samples were analyzed diluted for Methods E300.0, E310.1, SW6020, SW8260B and SW8270C-SIM, resulting in raised RLs for non-detected analytes.
4. Four samples for Method SW7196A, and 11 samples for Method SM3500, were analyzed outside of holding time. Fifteen results were qualified as estimated.
5. Initial and continuing calibration exceedances were observed for Method SW8260B; 162 results were qualified as estimated.
6. Field duplicate RPD exceedances were observed for Method SW8260B; two results were qualified as estimated.
7. Surrogate recovery exceedances were observed in 13 samples for Method SW8260B; 48 results were qualified as estimated.
8. LCS recovery exceedances were observed for Method SW8260B; 22 results were qualified as estimated.
9. MS/MSD recovery exceedances were observed for Methods SW6020, SW7196A and SW8260B; 12 results were qualified as estimated.
10. Serial dilution RPD exceedances were observed for Method SW6020; two results were qualified as estimated.

11. Two Method SW6020 analytes were detected at higher concentrations in the dissolved sample than in the total sample; four results were qualified as estimated.

12. Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives.

References

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Table 7– Validation Findings

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SM3500	ASE-22B-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-23B-9C1	Ferrous Iron	0.2	mg/L	J	HTA
SM3500	ASE-60A-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-65A-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-70A-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-73A-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-76B-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-85A-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	BC-17-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	PL-201A-9C1	Ferrous Iron	0.1	mg/L	J	HTA
SM3500	PL-520-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SW6020	ASE-49B-9C1	Manganese	1.7	ug/l	J	TD
SW6020	ASE-49B-9C1	Manganese	1	ug/l	UJ	TD
SW6020	ASE-65A-9C1	Calcium	50000	ug/l	J	MSL MSDL
SW6020	ASE-65A-9C1	Potassium	5400	ug/l	J	SDIL
SW6020	ASE-72B-9C1	Iron	320	ug/l	J	TD
SW6020	ASE-72B-9C1	Iron	680	ug/l	J	TD
SW6020	ASE-72B-9C1	Manganese	14	ug/l	J	SDIL
SW7196A	ASE-22B-9C1	Hexavalent Chromium	0.03	mg/l	J	HTA
SW7196A	ASE-23B-9C1	Hexavalent Chromium	0.01	mg/l	UJ	HTA MSL MSDL
SW7196A	ASE-65A-9C1	Hexavalent Chromium	0.01	mg/l	UJ	HTA
SW7196A	PL-201A-9C1	Hexavalent Chromium	0.01	mg/l	UJ	HTA
SW8260B	ASE-100A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-100A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-101A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-101A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-101A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-103A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-103A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-108A-9C1	1,1,1-Trichloroethane	4.5	ug/l	J	MSH
SW8260B	ASE-108A-9C1	Benzene	49	ug/l	J	MSDL
SW8260B	ASE-108A-9C1	n-Butylbenzene	5.6	ug/l	J	MSH MSDH
SW8260B	ASE-108A-9C1	sec-Butylbenzene	3	ug/l	J	MSDL
SW8260B	ASE-109A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-109A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-109A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-110A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-110A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-110A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-112A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-116A-9C1	Iodomethane	33	ug/l	UJ	LCSL
SW8260B	ASE-123A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-123A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-123A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-126A-9C1	1,1-Dichloroethane	13	ug/l	J	SSH

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260B	ASE-126A-9C1	1,1-Dichloroethene	1	ug/l	J	SSH
SW8260B	ASE-126A-9C1	cis-1,2-Dichloroethene	1	ug/l	J	SSH
SW8260B	ASE-126A-9C1	MTBE	72	ug/l	J	SSH
SW8260B	ASE-126A-9C1	sec-Butylbenzene	0.9	ug/l	J	SSH
SW8260B	ASE-126A-9C1	Trichloroethene	1.2	ug/l	J	SSH
SW8260B	ASE-126A-9C1	Vinyl Chloride	1.2	ug/l	J	SSH
SW8260B	ASE-129A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-129A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-21C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-23B-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-23B-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-23B-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-24C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-24C-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-24C-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-25C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-25C-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-27A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-27A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-29A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-29A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-29A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-32A-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-32A-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-33A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-33A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-33A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-37A-9C1	Naphthalene	10	ug/l	J	LCSH
SW8260B	ASE-38A-9C1	Bromomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-38A-9C1	Vinyl Acetate	100	ug/l	UJ	ICRSD
SW8260B	ASE-42C-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-42C-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-43B-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-43C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-46B-9C1	1,1-Dichloroethane	9	ug/l	J	MSH
SW8260B	ASE-46B-9C1	cis-1,2-Dichloroethene	2	ug/l	J	MSH
SW8260B	ASE-46B-9C1	MTBE	4.5	ug/l	J	MSH
SW8260B	ASE-46B-9C1	Vinyl Chloride	1.4	ug/l	J	MSH
SW8260B	ASE-48B-9C1	1,1-Dichloroethane	8.5	ug/l	J	SSH
SW8260B	ASE-48B-9C1	MTBE	14	ug/l	J	SSH
SW8260B	ASE-48B-9C1	Tetrachloroethene	0.6	ug/l	J	SSH
SW8260B	ASE-48B-9C1	Trichloroethene	3	ug/l	J	SSH
SW8260B	ASE-49B-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-49B-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-50C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-55A-9C1	Chloroethane	2.3	ug/l	J	ICVSH

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260B	ASE-55A-9C1	sec-Butylbenzene	4.8	ug/l	J	ICVSH
SW8260B	ASE-55A-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-58A-9C1	1,1-Dichloroethane	21	ug/l	J	SSH
SW8260B	ASE-58A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-58A-9C1	Benzene	9.5	ug/l	J	SSH
SW8260B	ASE-58A-9C1	Chloroethane	1.2	ug/l	J	SSH
SW8260B	ASE-58A-9C1	cis-1,2-Dichloroethene	2	ug/l	J	SSH
SW8260B	ASE-58A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-58A-9C1	MTBE	15	ug/l	J	SSH
SW8260B	ASE-58A-9C1	Trichloroethene	1	ug/l	J	SSH
SW8260B	ASE-58A-9C1	Vinyl Chloride	4.1	ug/l	J	SSH
SW8260B	ASE-60A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-60A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-60A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-61A-9C1	1,1-Dichloroethane	0.5	ug/l	J	SSH
SW8260B	ASE-61A-9C1	1,1-Dichloroethene	1.5	ug/l	J	SSH
SW8260B	ASE-61A-9C1	Chloroform	0.8	ug/l	J	SSH
SW8260B	ASE-61A-9C1	Tetrachloroethene	1.6	ug/l	J	SSH
SW8260B	ASE-61A-9C1	Trichloroethene	0.9	ug/l	J	SSH
SW8260B	ASE-63A-9C1	Naphthalene	190	ug/l	J	LCSH
SW8260B	ASE-64A-9C1	Naphthalene	35	ug/l	J	LCSH
SW8260B	ASE-65A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-65A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-65A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-70A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-70A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-70A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-72A-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-72A-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-72B-9C1	Bromomethane	4	ug/l	UJ	CCVL
SW8260B	ASE-72B-9C1	Vinyl Acetate	40	ug/l	UJ	ICRSD
SW8260B	ASE-73A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-73A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-73A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-73B-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-73B-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-73C-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-73C-9C1	Tetrachloroethene	1.3	ug/l	J	MSH
SW8260B	ASE-73C-9C1	Trichloroethene	84	ug/l	J	MSDL
SW8260B	ASE-73C-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-75A-9C1	1,1-Dichloroethane	0.8	ug/l	J	SSH
SW8260B	ASE-75A-9C1	1,1-Dichloroethene	1.1	ug/l	J	SSH
SW8260B	ASE-75A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-75A-9C1	Trichloroethene	0.7	ug/l	J	SSH
SW8260B	ASE-75B-9C1	1,1-Dichloroethane	0.6	ug/l	J	SSH
SW8260B	ASE-75B-9C1	1,1-Dichloroethene	1.5	ug/l	J	SSH

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260B	ASE-75B-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-75B-9C1	cis-1,2-Dichloroethene	5.5	ug/l	J	SSH
SW8260B	ASE-75B-9C1	Trichloroethene	21	ug/l	J	SSH
SW8260B	ASE-75C-9C1	Chloroform	0.6	ug/l	U	EBH
SW8260B	ASE-75C-9C1	Vinyl Acetate	10	ug/l	UJ	ICVSL
SW8260B	ASE-76A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-76A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-76A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-76B-9C1	2-Hexanone	25	ug/l	UJ	CCVL
SW8260B	ASE-76B-9C1	tert-Butylbenzene	1.3	ug/l	UJ	CCVL
SW8260B	ASE-76B-9C1	Vinyl Acetate	25	ug/l	UJ	LCSL
SW8260B	ASE-79C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-81A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-82C-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-82C-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-83A-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-83A-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-83B-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-83B-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-83C-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	ASE-83C-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	ASE-84A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-84A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-84A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-84C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-84C-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-84C-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-85A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-85A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	ASE-85A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	ASE-85B-9C1	Bromomethane	2	ug/l	UJ	CCVL
SW8260B	ASE-85B-9C1	Vinyl Acetate	20	ug/l	UJ	ICRSD
SW8260B	ASE-87A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-87A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	ASE-88B-9C1	Chloroform	0.6	ug/l	U	EBH
SW8260B	ASE-88B-9C1	Vinyl Acetate	10	ug/l	UJ	ICVSL
SW8260B	ASE-92A-9C1	Naphthalene	70	ug/l	J	LCSH
SW8260B	ASE-96A-9C1	MTBE	65	ug/l	J	SSH
SW8260B	ASE-97A-9C1	1,1-Dichloroethane	16	ug/l	J	SSH
SW8260B	ASE-97A-9C1	1,1-Dichloroethene	2.6	ug/l	J	SSH
SW8260B	ASE-97A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-97A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	ASE-97A-9C1	cis-1,2-Dichloroethene	1.1	ug/l	J	SSH
SW8260B	ASE-97A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	ASE-97A-9C1	MTBE	37	ug/l	J	SSH
SW8260B	ASE-97A-9C1	Trichloroethene	1.5	ug/l	J	SSH

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260B	ASE-97A-9C1	Vinyl Chloride	1.6	ug/l	J	SSH
SW8260B	ASE-98A-9C1	Methylene Chloride	11	ug/l	J	SSH
SW8260B	ASE-99A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	ASE-99A-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	BC-11A-9C1	Bromomethane	2	ug/l	UJ	CCVL
SW8260B	BC-11A-9C1	Vinyl Acetate	20	ug/l	UJ	ICRSD
SW8260B	BC-11B-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	BC-11B-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	BC-12-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-12-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	BC-12-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	BC-14-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-14-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	BC-17-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-17-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	BC-17-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	BC-2-9C1	1,1-Dichloroethane	0.6	ug/l	J	SSH
SW8260B	BC-2-9C1	1,1-Dichloroethene	0.8	ug/l	J	SSH
SW8260B	BC-2-9C1	Chloroform	0.5	ug/l	J	SSH
SW8260B	BC-2-9C1	cis-1,2-Dichloroethene	0.6	ug/l	J	SSH
SW8260B	BC-2-9C1	Tetrachloroethene	1.5	ug/l	J	SSH
SW8260B	BC-2-9C1	Trichloroethene	6.7	ug/l	J	SSH
SW8260B	BC-3-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-3-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	BC-3-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	BC-6-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-6-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	BC-6-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	BC-8A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-8A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	BC-8A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	BC-8B-9C1	2-Hexanone	20	ug/l	UJ	CCVL
SW8260B	BC-8B-9C1	4-Methyl-2-Pentanone	20	ug/l	UJ	CCVL
SW8260B	BC-8B-9C1	Hexachlorobutadiene	4	ug/l	UJ	CCVL
SW8260B	BC-8C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	BC-8C-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	BC-8C-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	BC-9-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PHXA-06-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	PHXA-06-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	PL-102A-9C1	Chloroform	4.1	ug/l	J	SSH
SW8260B	PL-102A-9C1	Toluene	0.5	ug/l	J	SSH
SW8260B	PL-103A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-103A-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	PL-103A-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	PL-103C-9C1	2-Hexanone	20	ug/l	UJ	CCVL

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260B	PL-103C-9C1	4-Methyl-2-Pentanone	20	ug/l	UJ	CCVL
SW8260B	PL-103C-9C1	Hexachlorobutadiene	4	ug/l	UJ	CCVL
SW8260B	PL-105A-9C1	Chloroethane	2.3	ug/l	J	SSH
SW8260B	PL-105A-9C1	Iodomethane	10	ug/l	UJ	LCSL
SW8260B	PL-201A-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-201A-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	PL-201A-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	PL-202C-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-202C-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	PL-202N-9C1	1,1-Dichloroethene	16	ug/l	J	FD
SW8260B	PL-202N-9C1	2-Hexanone	20	ug/l	UJ	CCVL
SW8260B	PL-202N-9C1	Iodomethane	20	ug/l	UJ	CCVL
SW8260B	PL-2103-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-2103-9C1	Trichloroethene	1.4	ug/l	J	SSH
SW8260B	PL-508-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-512-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-512-9C1	4-Methyl-2-Pentanone	10	ug/l	UJ	CCVL
SW8260B	PL-512-9C1	Hexachlorobutadiene	2	ug/l	UJ	CCVL
SW8260B	PL-513-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-513-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	PL-516-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-516-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	PL-517-9C1	1,1-Dichloroethene	23	ug/l	J	FD
SW8260B	PL-517-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-517-9C1	Iodomethane	10	ug/l	UJ	CCVL
SW8260B	PL-520-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-520-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	PL-520-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	PL-523-9C1	2-Hexanone	10	ug/l	UJ	CCVL
SW8260B	PL-523-9C1	tert-Butylbenzene	0.5	ug/l	UJ	CCVL
SW8260B	PL-523-9C1	Vinyl Acetate	10	ug/l	UJ	LCSL
SW8260B	PL-525-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	PL-525-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	PL-526-9C1	Bromomethane	1	ug/l	UJ	CCVL
SW8260B	PL-526-9C1	Vinyl Acetate	10	ug/l	UJ	ICRSD
SW8260B	PL-528-9C1	Iodomethane	50	ug/l	UJ	LCSL
SW8260B	PL-531-9C1	Naphthalene	32	ug/l	J	LCSH
SW8260B	PZ-1B-9C1	Bromomethane	4	ug/l	UJ	CCVL
SW8260B	PZ-1B-9C1	Vinyl Acetate	40	ug/l	UJ	ICRSD
SM3500	ASE-22B-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA
SM3500	ASE-23B-9C1	Ferrous Iron	0.2	mg/L	J	HTA
SM3500	ASE-60A-9C1	Ferrous Iron	0.1	mg/L	UJ	HTA

Notes:

CCVL = Continuing calibration verification recovery greater than the upper control limit

EBH = Equipment blank concentration above the reporting limit
FD = Field duplicate relative percent difference criterion exceeded
HTA = Analytical holding time exceeded
ICRSD = Initial calibration relative standard deviation criterion exceeded
ICVSH = Initial calibration verification recovery greater than the upper control limit
ICVSL = Initial calibration verification recovery less than the lower control limit
LCSH = Laboratory control sample recovery greater than the upper control limit
LCSL = Laboratory control sample recovery less than the lower control limit
MSDH = Matrix spike duplicate recovery greater than the upper control limit
MSDL = Matrix spike duplicate recovery less than the lower control limit
MSH = Matrix spike recovery greater than the upper control limit
MSL = Matrix spike recovery less than the lower control limit
MTBE = methyl tert-butyl ether
SDIL = Serial dilution relative percent difference criterion exceeded
SSH = Surrogate recovery greater than the upper control limit
TD = Total concentration less than dissolved concentration
mg/l = Milligrams per liter
ug/l = Micrograms per liter

Attachment 1

Samples Associated with DQE		
Sample ID	**Sample Date**	**Sample Type**
PL-501-9C1B	09/08/2009	EB
PL-506-9C1	09/09/2009	EB
PL-511-9C1	09/09/2009	EB
PL-510-9C1	09/10/2009	EB
PL-515-9C1	09/10/2009	EB
PL-507-9C1	09/11/2009	EB
PL-514-9C1	09/11/2009	EB
PL-518-9C1	09/14/2009	EB
PL-519-9C1	09/14/2009	EB
PL-522-9C1	09/15/2009	EB
PL-521-9C1	09/15/2009	EB
PL-524-9C1	09/16/2009	EB
PL-527-9C1	09/16/2009	EB
PL-529-9C1	09/17/2009	EB
PL-530-9C1	09/17/2009	EB
PL-532-9C1	09/18/2009	EB
PL-533-9C1	09/18/2009	EB
PL-503-9C1	09/08/2009	FD
PL-502-9C1	09/08/2009	FD
PL-509-9C1	09/09/2009	FD
PL-504-9C1	09/09/2009	FD
PL-505-9C1	09/10/2009	FD
PL-508-9C1	09/10/2009	FD
PL-512-9C1	09/11/2009	FD
PL-513-9C1	09/11/2009	FD
PL-516-9C1	09/14/2009	FD
PL-517-9C1	09/14/2009	FD
PL-520-9C1	09/15/2009	FD
PL-523-9C1	09/15/2009	FD
PL-525-9C1	09/16/2009	FD
PL-526-9C1	09/16/2009	FD
PL-528-9C1	09/17/2009	FD
PL-531-9C1	09/18/2009	FD
ASE-36A-9C1	09/08/2009	REG
BC-10B-9C1	09/08/2009	REG
ASE-75B-9C1	09/08/2009	REG
BC-15-9C1	09/08/2009	REG
BC-1-9C1	09/08/2009	REG
ASE-88B-9C1	09/08/2009	REG
ASE-61A-9C1	09/08/2009	REG
BC-2-9C1	09/08/2009	REG

Samples Associated with DQE		
Sample ID	**Sample Date**	**Sample Type**
PL-102A-9C1	09/08/2009	REG
PL-2103-9C1	09/08/2009	REG
ASE-21C-9C1	09/08/2009	REG
BC-10A-9C1	09/08/2009	REG
BC-10C-9C1	09/08/2009	REG
ASE-75C-9C1	09/08/2009	REG
ASE-75A-9C1	09/08/2009	REG
ASE-19B-9C1	09/09/2009	REG
ASE-125A-9C1	09/09/2009	REG
ASE-124A-9C1	09/09/2009	REG
ASE-20B-9C1	09/09/2009	REG
ASE-95A-9C1	09/09/2009	REG
ASE-44B-9C1	09/09/2009	REG
ASE-122A-9C1	09/09/2009	REG
ASE-113A-9C1	09/09/2009	REG
ASE-19C-9C1	09/09/2009	REG
ASE-45B-9C1	09/09/2009	REG
ASE-48B-9C1	09/09/2009	REG
ASE-20C-9C1	09/09/2009	REG
ASE-106A-9C1	09/09/2009	REG
ASE-96A-9C1	09/09/2009	REG
ASE-34B-9C1	09/10/2009	REG
ASE-128A-9C1	09/10/2009	REG
ASE-43C-9C1	09/10/2009	REG
ASE-50C-9C1	09/10/2009	REG
BC-3-9C1	09/10/2009	REG
ASE-43B-9C1	09/10/2009	REG
ASE-35A-9C1	09/10/2009	REG
ASE-126A-9C1	09/10/2009	REG
BC-9-9C1	09/10/2009	REG
ASE-105A-9C1	09/10/2009	REG
ASE-81A-9C1	09/10/2009	REG
ASE-112A-9C1	09/10/2009	REG
ASE-34A-9C1	09/10/2009	REG
ASE-98A-9C1	09/10/2009	REG
ASE-99A-9C1	09/11/2009	REG
ASE-79C-9C1	09/11/2009	REG
ASE-97A-9C1	09/11/2009	REG
ASE-100A-9C1	09/11/2009	REG
ASE-84A-9C1	09/11/2009	REG
ASE-84C-9C1	09/11/2009	REG
ASE-29A-9C1	09/11/2009	REG
ASE-109A-9C1	09/11/2009	REG
ASE-103A-9C1	09/11/2009	REG
ASE-101A-9C1	09/11/2009	REG
PL-103A-9C1	09/11/2009	REG

Samples Associated with DQE		
Sample ID	**Sample Date**	**Sample Type**
ASE-123A-9C1	09/11/2009	REG
ASE-110A-9C1	09/11/2009	REG
ASE-129A-9C1	09/11/2009	REG
ASE-33A-9C1	09/11/2009	REG
PL-103C-9C1	09/11/2009	REG
BC-8C-9C1	09/11/2009	REG
BC-8B-9C1	09/11/2009	REG
BC-8A-9C1	09/11/2009	REG
BC-12-9C1	09/11/2009	REG
ASE-27A-9C1	09/14/2009	REG
ASE-78B-9C1	09/14/2009	REG
ASE-25C-9C1	09/14/2009	REG
ASE-54A-9C1	09/14/2009	REG
ASE-58A-9C1	09/14/2009	REG
ASE-69A-9C1	09/14/2009	REG
BC-13-9C1	09/14/2009	REG
ASE-86A-9C1	09/14/2009	REG
PL-2102-9C1	09/14/2009	REG
PL-2101-9C1	09/14/2009	REG
ASE-87A-9C1	09/14/2009	REG
BC-14-9C1	09/14/2009	REG
BC-4-9C1	09/14/2009	REG
PL-202N-9C1	09/14/2009	REG
PL-202C-9C1	09/14/2009	REG
BC-17-9C1	09/15/2009	REG
ASE-46B-9C1	09/15/2009	REG
ASE-23B-9C1	09/15/2009	REG
ASE-60A-9C1	09/15/2009	REG
BC-6-9C1	09/15/2009	REG
ASE-22B-9C1	09/15/2009	REG
ASE-65A-9C1	09/15/2009	REG
PL-201A-9C1	09/15/2009	REG
ASE-24C-9C1	09/15/2009	REG
ASE-76A-9C1	09/15/2009	REG
ASE-73A-9C1	09/15/2009	REG
ASE-76B-9C1	09/15/2009	REG
ASE-85A-9C1	09/15/2009	REG
ASE-70A-9C1	09/15/2009	REG
ASE-83A-9C1	09/16/2009	REG
ASE-32A-9C1	09/16/2009	REG
ASE-82C-9C1	09/16/2009	REG
ASE-83B-9C1	09/16/2009	REG
ASE-77B-9C1	09/16/2009	REG
ASE-42C-9C1	09/16/2009	REG
ASE-77A-9C1	09/16/2009	REG
BC-16-9C1	09/16/2009	REG

Samples Associated with DQE		
Sample ID	**Sample Date**	**Sample Type**
ASE-22C-9C1	09/16/2009	REG
ASE-83C-9C1	09/16/2009	REG
ASE-85B-9C1	09/16/2009	REG
BC-11B-9C1	09/16/2009	REG
BC-11A-9C1	09/16/2009	REG
PHXA-06-9C1	09/16/2009	REG
ASE-22A-9C1	09/16/2009	REG
ASE-108A-9C1	09/17/2009	REG
ASE-116A-9C1	09/17/2009	REG
PZ-1B-9C1	09/17/2009	REG
PZ-1A-9C1	09/17/2009	REG
PL-105A-9C1	09/17/2009	REG
ASE-26A-9C1	09/17/2009	REG
ASE-62A-9C1	09/17/2009	REG
ASE-73B-9C1	09/17/2009	REG
ASE-38A-9C1	09/17/2009	REG
ASE-40B-9C1	09/17/2009	REG
ASE-41B-9C1	09/17/2009	REG
ASE-47B-9C1	09/17/2009	REG
ASE-49B-9C1	09/17/2009	REG
ASE-73C-9C1	09/17/2009	REG
ASE-72B-9C1	09/17/2009	REG
ASE-72A-9C1	09/17/2009	REG
BC-7A-9C1	09/18/2009	REG
ASE-68A-9C1	09/18/2009	REG
ASE-37A-9C1	09/18/2009	REG
ASE-63A-9C1	09/18/2009	REG
ASE-127A-9C1	09/18/2009	REG
ASE-55A-9C1	09/18/2009	REG
ASE-92A-9C1	09/18/2009	REG
ASE-64A-9C1	09/18/2009	REG
TB-090809A	09/08/2009	TB
TB-090809B	09/08/2009	TB
TB-090909A	09/09/2009	TB
TB-090909B	09/09/2009	TB
TB-091009B	09/10/2009	TB
TB-091009A	09/10/2009	TB
TB-091109A	09/11/2009	TB
TB-091109B	09/11/2009	TB
TB-091409A	09/14/2009	TB
TB-091409B	09/14/2009	TB
TB-091509A	09/15/2009	TB
TB-091509B	09/15/2009	TB
TB-091609B	09/16/2009	TB
TB-091609A	09/16/2009	TB
TB-091709A	09/17/2009	TB

Samples Associated with DQE		
Sample ID	**Sample Date**	**Sample Type**
TB-091709B	09/17/2009	TB
TB-091809B	09/18/2009	TB
TB-091809A	09/18/2009	TB

Notes:

EB = Equipment blank
FD = Field duplicate
REG = Regular sample
TB = Trip blank

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214803
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-090909B	214803-001
ASE-125A-9C1	214803-002
ASE-95A-9C1	214803-003
ASE-96A-9C1	214803-004
ASE-113A-9C1	214803-005
ASE-122A-9C1	214803-006
ASE-106A-9C1	214803-007
ASE-124A-9C1	214803-008
PL-511-9C1	214803-009
PL-509-9C1	214803-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214803**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/10/09**
Samples Received:	**09/10/09**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 09/10/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High response was observed for n-butylbenzene in the CCV analyzed 09/19/09 15:06; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High response was observed for iodomethane in the CCV analyzed 09/21/09 09:30; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for n-butylbenzene in the BS/BSD for batch 155093; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High recovery was observed for n-butylbenzene in the MS of ASE-113A-9C1 (lab # 214803-005); the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High surrogate recoveries were observed for bromofluorobenzene in ASE-96A-9C1 (lab # 214803-004) and the method blank for batch 155111.

No other analytical problems were encountered.

Chain of Custody

214803

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

Site Name: Sky Harbor
Location of Site: Phoenix, AZ
Phase:
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. Wiese - D. Foehr - M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Order

Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	TB	--	--	TB-090909B	9/9/9	0005				1		N	X														
2	ASE125A	--	119	ASE-125A-9C1	9/9/9	0112			2	4	G	N	X	X													
3	ASE-95A	--	119	ASE-95A-9C1	9/9/9	0152			3	4	G	N	X	X													
4	ASE-96A	--	109	ASE-96A-9C1	9/9/9	0235				4	G	N	X	X													
5	ASE-113A	--	119	ASE-113A-9C1	9/9/9	0332				12	G	N	X	X											X		
6	ASE-122A	--	101	ASE-122A-9C1	9/9/9	0408				4	G	N	X	X													
7	ASE-106A	--	122	ASE-106A-9C1	9/9/9	0522			2	4	G	N	X	X													
8	ASE-124A	--	118	ASE-124A-9C1	9/9/9	0604			2	4	G	N	X	X													
9	~~PL-509~~	~~--~~	~~--~~	~~PL-509-9C1~~	~~9/9/9~~	~~0614~~				~~4~~	~~G~~	~~N~~	~~X~~	~~X~~	2 MEH												
10	PL-511	--	--	PL-511-9C1	9/9/9	0631				4	G	N	X	X													
11				PL-509-9C1	09/09/09	0614				4	G	N	X	X													
12																											

(9) (10)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	H+A	09/09/09 11:00		FED EX	09/09/09 11:00	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
			9/10/9		1030	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214803 Date Received 9-10-9 Number of coolers 1
Client Flexwell Project Quarterly UST

Date Opened 9-10-9 By (print) SEVANS (sign) [signature]
Date Logged in 9/11/9 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) ~~FEDEX~~ YES NO
   Shipping info 5630 5639 5030

2A. Were custody seals present? ... ~~YES~~ (circle) on cooler on samples NO
   How many 2 Name [illegible] Date 9-9-9
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.3

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO ☆
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS
☆ BROKEN VOA'S: #2 = 2/3 VOAS
#3 = 1/3
#7+8 = 2/3 VOAS

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1

Rev. 6 Number 1 of 3
Effective: 23 July 2008
Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc

Laboratory Job Number 214803

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/09/09
Units:	ug/L	Received:	09/10/09
Diln Fac:	1.000	Prepared:	09/16/09
Batch#:	154973		

Field ID: ASE-125A-9C1 Lab ID: 214803-002
Type: SAMPLE Analyzed: 09/20/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	91	50-120	

Field ID: ASE-95A-9C1 Lab ID: 214803-003
Type: SAMPLE Analyzed: 09/20/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

Field ID: ASE-96A-9C1 Lab ID: 214803-004
Type: SAMPLE Analyzed: 09/20/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-113A-9C1 Lab ID: 214803-005
Type: SAMPLE Analyzed: 09/18/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	91	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/09/09
Units:	ug/L	Received:	09/10/09
Diln Fac:	1.000	Prepared:	09/16/09
Batch#:	154973		

Field ID: ASE-122A-9C1 Lab ID: 214803-006
Type: SAMPLE Analyzed: 09/22/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Field ID: ASE-106A-9C1 Lab ID: 214803-007
Type: SAMPLE Analyzed: 09/22/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: ASE-124A-9C1 Lab ID: 214803-008
Type: SAMPLE Analyzed: 09/22/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Field ID: PL-511-9C1 Lab ID: 214803-009
Type: SAMPLE Analyzed: 09/22/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	114	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/09/09
Units:	ug/L	Received:	09/10/09
Diln Fac:	1.000	Prepared:	09/16/09
Batch#:	154973		

Field ID:	PL-509-9C1	Lab ID:	214803-010
Type:	SAMPLE	Analyzed:	09/22/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	95	50-120	

Type:	BLANK	Analyzed:	09/18/09
Lab ID:	QC512301		

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512302	Batch#:	154973
Matrix:	Water	Prepared:	09/16/09
Units:	ug/L	Analyzed:	09/18/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,233	89	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-113A-9C1	Batch#:	154973
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Prepared:	09/16/09
Diln Fac:	1.000	Analyzed:	09/18/09

Type: MS Lab ID: QC512303

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	<16.22	2,500	2,273	91	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Type: MSD Lab ID: QC512304

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,216	89	54-120	3	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512305	Batch#:	154973
Matrix:	Water	Prepared:	09/16/09
Units:	ug/L	Analyzed:	09/18/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,324	93	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	87	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507002
Units : mg/L

Name : DSL_225
Date : 13-AUG-2009 21:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_012	229324507012	DSL_10	13-AUG-2009 21:35	S11869
L2	225_013	229324507013	DSL_100	13-AUG-2009 22:03	S11870
L3	225_014	229324507014	DSL_500	13-AUG-2009 22:31	S11871
L4	225_015	229324507015	DSL_1000	13-AUG-2009 22:58	S11872
L5	225_016	229324507016	DSL_5000	13-AUG-2009 23:26	S11868
L6	225_017	229324507017	DSL_7500	13-AUG-2009 23:54	S11873

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	46507	41830	44857	42384	42411	43420	AVRG		2.30E-5		43568	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	7	100.0	-4	500.0	3	1000	-3	5000	-3	7500	0

TFB 08/15/09 : Levels 1-5, ICV, and IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 229324507002

Name : DSL_225
Cal Date : 13-AUG-2009

ICV 229324507019 (225_019 14-AUG-2009) stds: S12546

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	483.5	mg/L	-3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507003
Units : mg/L

Name : MO_225
Date : 14-AUG-2009 02:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_022	229324507022	MO_50	14-AUG-2009 02:16	S12675
L2	225_023	229324507023	MO_250	14-AUG-2009 02:45	S12676
L3	225_024	229324507024	MO_500	14-AUG-2009 03:14	S12677
L4	225_025	229324507025	MO_1000	14-AUG-2009 03:43	S12678
L5	225_026	229324507026	MO_5000	14-AUG-2009 04:11	S12679

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	33336	31193	30777	30135	28013	AVRG		3.26E-5		30691	6	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C22-C32	B	50.00	9	250.0	2	500.0	0	1000	-2	5000	-9

TFB 08/15/09 : Levels 1-3,5, and IB: corrected automatically drawn baseline.

TFB 08/15/09 : Level 6 was dropped due to high %RSD.

TFB 08/15/09 : This instrument will not be used to analyze MO ranges C28-C36 and C28-C40 due to out of range %D.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507001
Units : mg/L

Name : HexOTP_225
Date : 14-AUG-2009 05:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_029	229324507029	HEX OTP_5	14-AUG-2009 05:37	S12539
L2	225_030	229324507030	HEX OTP_10	14-AUG-2009 06:06	S12540
L3	225_031	229324507031	HEX OTP_25	14-AUG-2009 06:34	S12541
L4	225_032	229324507032	HEX OTP_50	14-AUG-2009 07:03	S12542
L5	225_033	229324507033	HEX OTP_100	14-AUG-2009 07:31	S12543
L6	225_034	229324507034	HEX OTP_200	14-AUG-2009 08:00	S12544

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	50142	49537	49526	49425	50986	52699	AVRG		1.98E-5		50386	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	B	5.000	0	10.00	-2	25.00	-2	50.00	-2	100.0	1	200.0	5

TFB 08/15/09 : IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC27A
Calnum : 979364016001
Units : mg/L

Name : HEXOTP_252
Date : 09-SEP-2009 23:02
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	252a010	979364016010	HEXOTP_5	09-SEP-2009 23:02	S12539
L2	252a011	979364016011	HEXOTP_10	09-SEP-2009 23:27	S12540
L3	252a012	979364016012	HEXOTP_25	09-SEP-2009 23:52	S12541
L4	252a013	979364016013	HEXOTP_50	10-SEP-2009 00:18	S12542
L5	252a014	979364016014	HEXOTP_100	10-SEP-2009 00:43	S12543
L6	252a015	979364016015	HEXOTP_200	10-SEP-2009 01:09	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	292914	298462	297423	279283	276264	293120	AVRG		3.45E-6		289578	3	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	1	10.00	3	25.00	3	50.00	-4	100.0	-5	200.0	1

JDG 09/10/09 : Integrated manual peak for: HEXOTP_5,10,25

Analyst: JDG Date: 09/11/09 Reviewer: EAH Date: 09/11/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 GCSV Water: EPA 8015B

Inst : GC27A
Calnum : 979364016002
Units : mg/L

Name : DSL_252
Date : 10-SEP-2009 01:59
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	252a017	979364016017	DSL_10	10-SEP-2009 01:59	S11869
L2	252a018	979364016018	DSL_100	10-SEP-2009 02:25	S11870
L3	252a019	979364016019	DSL_500	10-SEP-2009 02:50	S11871
L4	252a020	979364016020	DSL_1000	10-SEP-2009 03:16	S11872
L5	252a021	979364016021	DSL_5000	10-SEP-2009 03:41	S11868
L6	252a022	979364016022	DSL_7500	10-SEP-2009 04:07	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	218729	290828	291141	289173	246828	261829	AVRG		3.75E-6		266421	11	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-18	100.0	9	500.0	9	1000	9	5000	-7	7500	-2

JDG 09/10/09 : Manually integrated the fuel hump for DSL_10 through _7500.

Analyst: JDG Date: 09/11/09 Reviewer: EAH Date: 09/11/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214803 GCSV Water
EPA 8015B

Inst : GC27A
Calnum : 979364016002

Name : DSL_252
Cal Date : 10-SEP-2009

ICV 979364016024 (252a024 10-SEP-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	536.9	mg/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 229374864023 File : 260_023 Time : 17-SEP-2009 19:40
Standards: S12545

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	41347	250.0	237.3	mg/L	-5	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	47079	50.00	46.72	mg/L	-7	15	

JDG 09/18/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/18/09 Reviewer: EAH Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229374864024 File : 260_024 Time : 17-SEP-2009 20:08
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	30377	500.0	494.9	mg/L	-1	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	51087	50.00	50.70	mg/L	1	15	

Analyst: JDG Date: 09/18/09 Reviewer: EAH Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 229374864039 File : 260_039 Time : 18-SEP-2009 03:10
Standards: S12546

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	41901	500.0	480.9	mg/L	-4	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	47567	50.00	47.20	mg/L	-6	15	

JDG 09/18/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/18/09 Reviewer: EAH Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229374864040 File : 260_040 Time : 18-SEP-2009 03:39
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	29783	500.0	485.2	mg/L	-3	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	51646	50.00	51.25	mg/L	3	15	

JDG 09/18/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/18/09 Reviewer: EAH Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 229374864055 File : 260_055 Time : 18-SEP-2009 10:46
Standards: S12547

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	41830	1000	960.1	mg/L	-4	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	48892	50.00	48.52	mg/L	-3	15	

JDG 09/18/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/18/09 Reviewer: EAH Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 229380981049 File : 264_049 Time : 22-SEP-2009 13:39
Standards: S12547

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	42476	1000	974.9	mg/L	-3	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	52456	50.00	52.05	mg/L	4	15	

TFB 09/22/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/22/09 Reviewer: JDG Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229380981050 File : 264_050 Time : 22-SEP-2009 14:10
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	32398	500.0	527.8	mg/L	6	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	53804	50.00	53.39	mg/L	7	15	

Analyst: TFB Date: 09/22/09 Reviewer: JDG Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 229380981063 File : 264_063 Time : 22-SEP-2009 20:53
Standards: S12545

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	41458	250.0	237.9	mg/L	-5	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	48493	50.00	48.12	mg/L	-4	15	

JDG 09/24/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229380981064 File : 264_064 Time : 22-SEP-2009 21:23
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	32896	500.0	535.9	mg/L	7	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	54010	50.00	53.60	mg/L	7	15	

JDG 09/24/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 229380981075 File : 264_075 Time : 23-SEP-2009 03:19
Standards: S12546

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	42666	500.0	489.6	mg/L	-2	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	50344	50.00	49.96	mg/L	0	15	

JDG 09/24/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229380981076 File : 264_076 Time : 23-SEP-2009 03:50
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	31894	500.0	519.6	mg/L	4	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	53427	50.00	53.02	mg/L	6	15	

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169376692004 File : 261b004 Time : 18-SEP-2009 15:36
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	41861	500.0	486.4	mg/L	-3	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67271	50.00	47.46	mg/L	-5	15	

TFB 09/18/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/18/09 Reviewer: JDG Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169376692005 File : 261b005 Time : 18-SEP-2009 16:04
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56965	250.0	248.3	mg/L	-1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	56877	50.00	40.12	mg/L	**-20**	15	c-

TFB 09/18/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/18/09 Reviewer: JDG Date: 09/21/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169376692018 File : 261b018 Time : 18-SEP-2009 22:20
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42013	500.0	488.2	mg/L	-2	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	68377	50.00	48.24	mg/L	-4	15	

JDG 09/20/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/20/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169376692019 File : 261b019 Time : 18-SEP-2009 22:48
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56229	500.0	490.2	mg/L	-2	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	60919	50.00	42.98	mg/L	-14	15	

JDG 09/20/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/20/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169379408004 File : 263b004 Time : 20-SEP-2009 12:52
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	40331	500.0	468.6	mg/L	-6	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	65874	50.00	46.47	mg/L	-7	15	

JDG 09/21/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169379408005 File : 263b005 Time : 20-SEP-2009 13:20
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	54986	500.0	479.3	mg/L	-4	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	54499	50.00	38.45	mg/L	**-23**	15	c-

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169379408020 File : 263b020 Time : 20-SEP-2009 20:55
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	40670	500.0	472.6	mg/L	-5	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	65723	50.00	46.36	mg/L	-7	15	

JDG 09/21/09 : MO_500:S12822

TFB 09/21/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 169379408021 File : 263b021 Time : 20-SEP-2009 21:23
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57882	1000	1009	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	61661	50.00	43.50	mg/L	-13	15	

JDG 09/21/09 : DSL_1000:S12547

TFB 09/21/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC27A Run Name : DSL_250 IDF : 1.0
Seqnum : 979376820005 File : 261a005 Time : 18-SEP-2009 18:18
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	979364016002	10-SEP-2009	266421	282229	250.0	264.8	mg/L	6	15	
o-Terphenyl	979364016001	09-SEP-2009	289578	293423	50.00	50.66	mg/L	1	15	

JDG 09/21/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214803 GCSV Water
EPA 8015B

Inst : GC27A Run Name : DSL_500 IDF : 1.0
Seqnum : 979376820015 File : 261a015 Time : 18-SEP-2009 22:58
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	979364016002	10-SEP-2009	266421	273696	500.0	513.7	mg/L	3	15	
o-Terphenyl	979364016001	09-SEP-2009	289578	297899	50.00	51.44	mg/L	3	15	

JDG 09/21/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B
Method : EPA 8015B

Begun : 03/29/09 13:43
SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169376692

Instrument : GC15B Begun : 09/18/09 14:12
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	261b001	X	PRIMER				09/18/09 14:12	1.0		
002	261b002	X	IB				09/18/09 14:40	1.0		
003	261b003	X	CMARKER				09/18/09 15:08	1.0	1	
004	261b004	CCV	MO_500				09/18/09 15:36	1.0	2	
005	261b005	CCV	DSL_250				09/18/09 16:04	1.0	3	
006	261b006	CCV	BUNK_500				09/18/09 16:32	1.0	4	
007	261b007	MSS	214803-005		Water	154973	09/18/09 17:13	1.0		
008	261b008	MSS	214812-015	S	Soil	155030	09/18/09 17:41	5.0		
009	261b009	SAMPLE	214867-001	S	Soil	155032	09/18/09 18:09	2.0		
010	261b010	SAMPLE	214867-007	S	Soil	155032	09/18/09 18:37	1.0		
011	261b011	X	IB				09/18/09 19:05	1.0		
012	261b012	BLANK	QC512526	S	Soil	155032	09/18/09 19:33	1.0		
013	261b013	BLANK	QC512520		Soil	155030	09/18/09 20:01	1.0		
014	261b014	BLANK	QC512520	S	Soil	155030	09/18/09 20:29	1.0		
015	261b015	LCS	QC512530	S	Soil	155032	09/18/09 20:57	1.0		
016	261b016	LCS	QC512305		Water	154973	09/18/09 21:25	1.0		
017	261b017	LCS	QC512524	S	Soil	155030	09/18/09 21:52	1.0		
018	261b018	CCV	MO_500				09/18/09 22:20	1.0	2	
019	261b019	CCV	DSL_500				09/18/09 22:48	1.0	5	
020	261b020	X	BUNK_500				09/18/09 23:16	1.0	4	
021	261b021	X	CCV				09/18/09 23:43	1.0	2	
022	261b022	X	CCV				09/19/09 00:11	1.0	5	
023	261b023	CCV	BUNK_500				09/19/09 00:39	1.0	4	
024	261b024	SAMPLE	214767-001	S	Soil	155030	09/19/09 01:07	5.0		
025	261b025	SAMPLE	214767-002	S	Soil	155030	09/19/09 01:35	1.0		
026	261b026	SAMPLE	214767-003	S	Soil	155030	09/19/09 02:03	1.0		
027	261b027	SAMPLE	214767-004	S	Soil	155030	09/19/09 02:31	1.0		
028	261b028	X	IB				09/19/09 02:59	1.0		
029	261b029	SAMPLE	214767-005	S	Soil	155030	09/19/09 03:27	1.0		
030	261b030	SAMPLE	214767-006	S	Soil	155030	09/19/09 03:55	1.0		
031	261b031	SAMPLE	214812-008	S	Soil	155030	09/19/09 04:23	1.0		
032	261b032	SAMPLE	214812-009	S	Soil	155030	09/19/09 04:51	1.0		
033	261b033	SAMPLE	214812-011	S	Soil	155030	09/19/09 05:19	1.0		
034	261b034	SAMPLE	214812-012	S	Soil	155030	09/19/09 05:47	1.0		
035	261b035	X	CMARKER				09/19/09 06:15	1.0	1	
036	261b036	CCV	MO_500				09/19/09 06:43	1.0	2	
037	261b037	CCV	DSL_250				09/19/09 07:11	1.0	3	
038	261b038	X	CCV				09/19/09 07:39	1.0	2	
039	261b039	X	CCV				09/19/09 08:07	1.0	3	
040	261b040	SAMPLE	214812-006	S	Soil	155030	09/19/09 08:35	1.0		
041	261b041	SAMPLE	214812-007	S	Soil	155030	09/19/09 09:03	25.0		2:BUNKC:12-40=6800
042	261b042	SAMPLE	214812-017	S	Soil	155030	09/19/09 09:31	5.0		2:BUNKC:12-40=9300
043	261b043	SAMPLE	214933-004		Soil	155030	09/19/09 10:00	3.0		
044	261b044	X	IB				09/19/09 10:28	1.0		
045	261b045	SAMPLE	214933-002		Soil	155030	09/19/09 10:56	1.0		
046	261b046	SAMPLE	214812-003	S	Soil	155030	09/19/09 11:24	1.0		
047	261b047	SAMPLE	214812-004	S	Soil	155030	09/19/09 11:52	1.0		
048	261b048	SAMPLE	214812-018	S	Soil	155030	09/19/09 12:19	1.0		
049	261b049	SAMPLE	214812-016	S	Soil	155030	09/19/09 12:47	1.0		
050	261b050	SAMPLE	214903-001		Water	154973	09/19/09 13:15	1.0		
051	261b051	CCV	MO_500				09/19/09 13:43	1.0	2	
052	261b052	CCV	DSL_1000				09/19/09 14:11	1.0	6	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169376692

Instrument : GC15B Begun : 09/18/09 14:12
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	261b053	X	CCV				09/19/09 14:39	1.0	2	
054	261b054	X	CCV				09/19/09 15:07	1.0	6	

JDG 09/20/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 54.

Standards used: 1=S11248 2=S12822 3=S12545 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169379408

Instrument : GC15B Begun : 09/20/09 11:28
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	263b001	X	PRIMER				09/20/09 11:28	1.0		
002	263b002	X	IB				09/20/09 11:56	1.0		
003	263b003	X	CMARKER				09/20/09 12:24	1.0	1	
004	263b004	CCV	MO_500				09/20/09 12:52	1.0	2	
005	263b005	CCV	DSL_500				09/20/09 13:20	1.0	3	
006	263b006	X	BUNK_500				09/20/09 13:48	1.0	4	
007	263b007	SAMPLE	214813-005	S	Soil	155032	09/20/09 14:52	2.0		
008	263b008	SAMPLE	214813-007	S	Soil	155032	09/20/09 15:20	2.0		2:BUNKC:12-40=5600
009	263b009	SAMPLE	214813-008	S	Soil	155032	09/20/09 15:48	5.0		
010	263b010	X	IB				09/20/09 16:16	1.0		
011	263b011	SAMPLE	214813-002	S	Soil	155032	09/20/09 16:44	1.0		
012	263b012	SAMPLE	214813-011	S	Soil	155032	09/20/09 17:12	1.0		
013	263b013	SAMPLE	214813-001	S	Soil	155032	09/20/09 17:40	1.0		
014	263b014	SAMPLE	214813-004	S	Soil	155032	09/20/09 18:08	1.0		
015	263b015	X	IB				09/20/09 18:36	1.0		
016	263b016	SAMPLE	214803-002		Water	154973	09/20/09 19:04	1.0		
017	263b017	SAMPLE	214803-003		Water	154973	09/20/09 19:31	1.0		
018	263b018	SAMPLE	214803-004		Water	154973	09/20/09 19:59	1.0		
019	263b019	X	DSL_1000				09/20/09 20:27	1.0	5	
020	263b020	CCV	MO_500				09/20/09 20:55	1.0	2	
021	263b021	CCV	DSL_1000				09/20/09 21:23	1.0	5	
022	263b022	X	CCV				09/20/09 21:50	1.0	2	
023	263b023	SAMPLE	214893-002	S	Water	155036	09/20/09 22:18	1.0		
024	263b024	SAMPLE	214893-003	S	Water	155036	09/20/09 22:46	1.0		
025	263b025	SAMPLE	214893-004	S	Water	155036	09/20/09 23:14	1.0		
026	263b026	SAMPLE	214893-005	S	Water	155036	09/20/09 23:42	1.0		
027	263b027	SAMPLE	214893-006	S	Water	155036	09/21/09 00:10	1.0		
028	263b028	CCV	DSL_500				09/21/09 00:38	1.0	3	
029	263b029	CCV	MO_500				09/21/09 01:06	1.0	2	
030	263b030	X	CCV				09/21/09 01:34	1.0	3	
031	263b031	X	CCV				09/21/09 02:02	1.0	2	

JDG 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Standards used: 1=S11248 2=S12822 3=S12546 4=S12582 5=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229324507

Instrument : GC14B Begun : 08/13/09 08:27
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	225_001	X	IB			08/13/09 08:27	1.0		
002	225_002	X	CMARKER			08/13/09 08:54	1.0	1	
003	225_003	X	CCV			08/13/09 09:23	1.0	2	
004	225_004	X	CCV			08/13/09 09:51	1.0	3	
005	225_005	X	IB			08/13/09 17:46	1.0		
006	225_006	X	IB			08/13/09 17:55	1.0		
007	225_007	X	IB			08/13/09 18:44	1.0		
008	225_008	X	IB			08/13/09 20:01	1.0		
009	225_009	X	IB			08/13/09 20:09	1.0		
010	225_010	X	IB			08/13/09 20:39	1.0		
011	225_011	IB	CALIB			08/13/09 21:07	1.0		
012	225_012	ICAL	DSL_10			08/13/09 21:35	1.0	4	
013	225_013	ICAL	DSL_100			08/13/09 22:03	1.0	5	
014	225_014	ICAL	DSL_500			08/13/09 22:31	1.0	6	
015	225_015	ICAL	DSL_1000			08/13/09 22:58	1.0	7	
016	225_016	ICAL	DSL_5000			08/13/09 23:26	1.0	8	
017	225_017	ICAL	DSL_7500			08/13/09 23:54	1.0	9	
018	225_018	IB	CALIB			08/14/09 00:22	1.0		
019	225_019	ICV	DSL_500			08/14/09 00:51	1.0	2	
020	225_020	X	ICV			08/14/09 01:19	1.0	2	
021	225_021	IB	CALIB			08/14/09 01:48	1.0		
022	225_022	ICAL	MO_50			08/14/09 02:16	1.0	10	
023	225_023	ICAL	MO_250			08/14/09 02:45	1.0	11	
024	225_024	ICAL	MO_500			08/14/09 03:14	1.0	12	
025	225_025	ICAL	MO_1000			08/14/09 03:43	1.0	13	
026	225_026	ICAL	MO_5000			08/14/09 04:11	1.0	14	
027	225_027	ICAL	MO_7500			08/14/09 04:40	1.0	15	
028	225_028	IB	CALIB			08/14/09 05:09	1.0		
029	225_029	ICAL	HEX OTP_5			08/14/09 05:37	1.0	16	
030	225_030	ICAL	HEX OTP_10			08/14/09 06:06	1.0	17	
031	225_031	ICAL	HEX OTP_25			08/14/09 06:34	1.0	18	
032	225_032	ICAL	HEX OTP_50			08/14/09 07:03	1.0	19	
033	225_033	ICAL	HEX OTP_100			08/14/09 07:31	1.0	20	
034	225_034	ICAL	HEX OTP_200			08/14/09 08:00	1.0	21	
035	225_035	IB	CALIB			08/14/09 08:28	1.0		
036	225_036	ICAL	JP5_10			08/14/09 08:56	1.0	22	
037	225_037	ICAL	JP5_100			08/14/09 09:24	1.0	23	
038	225_038	ICAL	JP5_500			08/14/09 10:29	1.0	24	
039	225_039	ICAL	JP5_1500			08/14/09 10:56	1.0	25	
040	225_040	ICAL	JP5_2500			08/14/09 11:24	1.0	26	
041	225_041	ICAL	JP5_5000			08/14/09 11:52	1.0	27	
042	225_042	IB	CALIB			08/14/09 12:20	1.0		
043	225_043	ICAL	BUNK_50			08/14/09 12:48	1.0	28	
044	225_044	ICAL	BUNK_250			08/14/09 13:16	1.0	29	
045	225_045	X	BUNK_500			08/14/09 13:44	1.0	30	
046	225_046	ICAL	BUNK_1250			08/14/09 14:12	1.0	31	
047	225_047	ICAL	BUNK_2500			08/14/09 14:40	1.0	32	
048	225_048	ICAL	BUNK_5000			08/14/09 15:08	1.0	33	
049	225_049	IB	CALIB			08/14/09 15:36	1.0		
050	225_050	CMARKER	C8-C50			08/14/09 16:04	1.0	1	
051	225_051	IB	CALIB			08/14/09 16:32	1.0		
052	225_052	ICAL	BUNK_500			08/15/09 12:20	1.0	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229324507

Instrument : GC14B Begun : 08/13/09 08:27
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Standards used: 1=S11825 2=S12546 3=S12687 4=S11869 5=S11870 6=S11871 7=S11872 8=S11868 9=S11873 10=S12675 11=S12676 12=S12677 13=S12678 14=S12679 15=S12680 16=S12539 17=S12540 18=S12541 19=S12542 20=S12543 21=S12544 22=S11894 23=S11895 24=S11896 25=S11897 26=S11898 27=S11893 28=S12707 29=S12708 30=S12709 31=S12710 32=S12711 33=S12706

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229374864

Instrument : GC14B
Method : EPA 8015B

Begun : 09/17/09 07:44
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	260_001	X	IB				09/17/09 07:44	1.0		
002	260_002	X	CMARKER				09/17/09 08:12	1.0	1	
003	260_003	CCV	DSL_1000				09/17/09 08:40	1.0	2	
004	260_004	CCV	MO_500				09/17/09 09:09	1.0	3	
005	260_005	SAMPLE	214849-007	S	Soil	154916	09/17/09 09:49	1.0		
006	260_006	MS	QC511859		Soil	154865	09/17/09 10:18	1.0		
007	260_007	MSD	QC511860		Soil	154865	09/17/09 10:46	1.0		1:BUNKC:12-40=5100
008	260_008	CCV	DSL_500				09/17/09 11:20	1.0	4	
009	260_009	CCV	MO_500				09/17/09 11:48	1.0	3	
010	260_010	X	TEHSURR				09/17/09 13:05	1.0	5	
011	260_011	MSS	214870-001		Soil	154916	09/17/09 14:01	1.0		13:BUNKC:12-40=29000
012	260_012	MS	QC512068		Soil	154916	09/17/09 14:29	1.0		14:BUNKC:12-40=48000
013	260_013	MSD	QC512069		Soil	154916	09/17/09 14:57	1.0		14:BUNKC:12-40=81000
014	260_014	X	IB				09/17/09 15:26	1.0		
015	260_015	MSS	214729-004		Soil	154916	09/17/09 15:54	20.0		
016	260_016	MS	QC512064		Soil	154916	09/17/09 16:22	20.0		
017	260_017	MSD	QC512065		Soil	154916	09/17/09 16:50	20.0		
018	260_018	SAMPLE	214729-003		Soil	154916	09/17/09 17:19	20.0		
019	260_019	SAMPLE	214729-006		Soil	154916	09/17/09 17:47	20.0		
020	260_020	X	IB				09/17/09 18:15	1.0		
021	260_021	SAMPLE	214848-002		Soil	154916	09/17/09 18:43	1.0		
022	260_022	SAMPLE	214848-003		Soil	154916	09/17/09 19:12	5.0		14:BUNKC:12-40=40000
023	260_023	CCV	DSL_250				09/17/09 19:40	1.0	6	
024	260_024	CCV	MO_500				09/17/09 20:08	1.0	3	
025	260_025	X	CCV				09/17/09 20:36	1.0	4	
026	260_026	X	CCV				09/17/09 21:04	1.0	3	
027	260_027	SAMPLE	214870-002		Soil	154916	09/17/09 21:33	1.0		14:BUNKC:12-40=39000
028	260_028	SAMPLE	214729-005		Soil	154916	09/17/09 22:01	20.0		
029	260_029	SAMPLE	214729-007		Soil	154916	09/17/09 22:29	20.0		
030	260_030	X	IB				09/17/09 22:57	1.0		
031	260_031	BLANK	QC512443	S	Soil	155012	09/17/09 23:25	1.0		
032	260_032	BLANK	QC512443		Soil	155012	09/17/09 23:53	1.0		
033	260_033	LCS	QC512444	S	Soil	155012	09/18/09 00:21	1.0		
034	260_034	LCS	QC512445	S	Soil	155012	09/18/09 00:50	1.0		
035	260_035	SAMPLE	214888-001		Soil	155012	09/18/09 01:18	1.0		
036	260_036	X	IB				09/18/09 01:46	1.0		
037	260_037	BLANK	QC512301	S	Water	154973	09/18/09 02:14	1.0		
038	260_038	BLANK	QC512301		Water	154973	09/18/09 02:42	1.0		
039	260_039	CCV	DSL_500				09/18/09 03:10	1.0	4	
040	260_040	CCV	MO_500				09/18/09 03:39	1.0	3	
041	260_041	X	CCV				09/18/09 04:07	1.0	2	
042	260_042	X	CCV				09/18/09 04:35	1.0	3	
043	260_043	LCS	QC512302	S	Water	154973	09/18/09 05:04	1.0		
044	260_044	SAMPLE	214947-001		Water	154973	09/18/09 05:32	1.0		
045	260_045	SAMPLE	214947-002		Water	154973	09/18/09 06:01	1.0		
046	260_046	SAMPLE	214946-003	S	Soil	155020	09/18/09 06:29	1.0		
047	260_047	SAMPLE	214946-002	S	Soil	155020	09/18/09 06:58	1.0		
048	260_048	X	IB				09/18/09 07:27	1.0		
049	260_049	SAMPLE	214946-001	S	Soil	155020	09/18/09 07:55	1.0		
050	260_050	SAMPLE	214946-004	S	Soil	155020	09/18/09 08:24	1.0		
051	260_051	SAMPLE	214761-014	S	Soil	155020	09/18/09 08:52	2.0		6:BUNKC:12-40=28000
052	260_052	SAMPLE	214761-012	S	Soil	155020	09/18/09 09:21	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229374864

Instrument : GC14B Begun : 09/17/09 07:44
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	260_053	X	IB				09/18/09 09:49	1.0		
054	260_054	SAMPLE	214731-003	S	Soil	155012	09/18/09 10:18	1.0		
055	260_055	CCV	DSL_1000				09/18/09 10:46	1.0	2	
056	260_056	CCV	MO_500				09/18/09 11:14	1.0	3	
057	260_057	BLANK	QC512443	S	Soil	155012	09/18/09 11:49	1.0		
058	260_058	SAMPLE	214870-002		Soil	154916	09/18/09 12:17	5.0		1:BUNKC:12-40=7400
059	260_059	SAMPLE	214848-003		Soil	154916	09/18/09 12:45	50.0		
060	260_060	CCV	DSL_500				09/18/09 13:27	1.0	4	
061	260_061	CCV	MO_500				09/18/09 13:55	1.0	3	

TFB 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 50.

JDG 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 51 through 56.

TFB 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 57 through 61.

Standards used: 1=S11825 2=S12547 3=S12822 4=S12546 5=S12934 6=S12545

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229380981

Instrument : GC14B Begun : 09/21/09 13:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
003	264_003	X	IB				09/21/09 13:41	1.0		
004	264_004	CMARKER	CMARKER				09/21/09 14:19	1.0	1	
005	264_005	CCV	DSL_250				09/21/09 14:50	1.0	2	
006	264_006	CCV	MO_500				09/21/09 15:22	1.0	3	
007	264_007	SAMPLE	215000-001	S	Soil	155101	09/21/09 16:02	20.0		1:BUNKC:12-40=5400
008	264_008	SAMPLE	215000-002	S	Soil	155101	09/21/09 16:33	20.0		1:BUNKC:12-40=12000
009	264_009	X	IB				09/21/09 17:05	1.0		
010	264_010	MS	QC512303		Water	154973	09/21/09 17:36	1.0		
011	264_011	MSD	QC512304		Water	154973	09/21/09 18:07	1.0		
012	264_012	BLANK	QC512665		Soil	155065	09/21/09 18:37	1.0		
013	264_013	LCS	QC512666	S	Soil	155065	09/21/09 19:08	1.0		
014	264_014	MSS	214853-007	S	Soil	155065	09/21/09 19:39	1.0		6:BUNKC:12-40=28000
015	264_015	MS	QC512667	S	Soil	155065	09/21/09 20:10	1.0		3:BUNKC:12-40=24000
016	264_016	MSD	QC512668	S	Soil	155065	09/21/09 20:40	1.0		6:BUNKC:12-40=28000
017	264_017	SAMPLE	214713-002		Soil	155065	09/21/09 21:11	1.0		
018	264_018	CCV	DSL_1000				09/21/09 21:42	1.0	4	
019	264_019	CCV	MO_500				09/21/09 22:13	1.0	3	
020	264_020	X	CCV				09/21/09 22:44	1.0	4	
021	264_021	X	CCV				09/21/09 23:15	1.0	3	
022	264_022	SAMPLE	214860-001	S	Soil	155065	09/21/09 23:46	3.0		
023	264_023	SAMPLE	214853-001	S	Soil	155065	09/22/09 00:17	1.0		11:BUNKC:12-40=36000
024	264_024	SAMPLE	214853-002	S	Soil	155065	09/22/09 00:48	1.0		13:BUNKC:12-40=43000
025	264_025	SAMPLE	214853-003	S	Soil	155065	09/22/09 01:19	3.0		2:BUNKC:12-40=18000
026	264_026	SAMPLE	214853-004	S	Soil	155065	09/22/09 01:50	1.0		11:BUNKC:12-40=41000
027	264_027	SAMPLE	214713-010		Soil	155065	09/22/09 02:21	1.0		
028	264_028	SAMPLE	214713-012		Soil	155065	09/22/09 02:52	1.0		
029	264_029	X	IB				09/22/09 03:23	1.0		
030	264_030	SAMPLE	214713-004		Soil	155065	09/22/09 03:54	1.0		1:BUNKC:12-40=5800
031	264_031	SAMPLE	214713-006		Soil	155065	09/22/09 04:25	1.0		
032	264_032	SAMPLE	214713-008		Soil	155065	09/22/09 04:56	1.0		
033	264_033	X	CMARKER				09/22/09 05:27	1.0	1	
034	264_034	CCV	DSL_500				09/22/09 05:58	1.0	5	
035	264_035	X	MO_500				09/22/09 06:29	1.0	3	
036	264_036	X	CCV				09/22/09 06:59	1.0	2	
037	264_037	CCV	MO_500				09/22/09 07:30	1.0	3	
038	264_038	SAMPLE	214853-005	S	Soil	155065	09/22/09 08:00	1.0		13:BUNKC:12-40=46000
039	264_039	SAMPLE	214853-006	S	Soil	155065	09/22/09 08:30	1.0		12:BUNKC:12-40=43000
040	264_040	SAMPLE	214853-008	S	Soil	155065	09/22/09 09:01	1.0		13:BUNKC:12-40=45000
041	264_041	SAMPLE	214853-009	S	Soil	155065	09/22/09 09:32	1.0		4:BUNKC:12-40=25000
042	264_042	SAMPLE	214853-010	S	Soil	155065	09/22/09 10:02	1.0		3:BUNKC:12-40=23000
043	264_043	SAMPLE	214853-011	S	Soil	155065	09/22/09 10:33	1.0		6:BUNKC:12-40=26000
044	264_044	SAMPLE	214853-012	S	Soil	155065	09/22/09 11:04	1.0		3:BUNKC:12-40=24000
045	264_045	X	IB				09/22/09 11:35	1.0		
046	264_046	SAMPLE	214882-005	S	WET DI Leachate	155106	09/22/09 12:06	1.0		
047	264_047	MSS	214853-007	S	Soil	155065	09/22/09 12:37	3.0		1:BUNKC:12-40=9500
048	264_048	MSS	214990-007		Soil	155134	09/22/09 13:08	1.0		
049	264_049	CCV	DSL_1000				09/22/09 13:39	1.0	4	
050	264_050	CCV	MO_500				09/22/09 14:10	1.0	3	
051	264_051	SAMPLE	214853-001	S	Soil	155065	09/22/09 14:41	5.0		1:BUNKC:12-40=6800
052	264_052	SAMPLE	214853-002	S	Soil	155065	09/22/09 15:12	5.0		1:BUNKC:12-40=8000
053	264_053	SAMPLE	214853-004	S	Soil	155065	09/22/09 15:43	5.0		1:BUNKC:12-40=7500
054	264_054	SAMPLE	214853-005	S	Soil	155065	09/22/09 16:14	5.0		1:BUNKC:12-40=8800

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229380981

Instrument : GC14B Begun : 09/21/09 13:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
055	264_055	SAMPLE	214853-006	S	Soil	155065	09/22/09 16:45	5.0		1:BUNKC:12-40=8200
056	264_056	SAMPLE	214853-008	S	Soil	155065	09/22/09 17:16	5.0		1:BUNKC:12-40=8600
057	264_057	X	IB				09/22/09 17:48	1.0		
058	264_058	SAMPLE	214882-004	S	WET DI Leachate	155106	09/22/09 18:19	1.0		
059	264_059	SAMPLE	214803-006		Water	154973	09/22/09 18:50	1.0		
060	264_060	SAMPLE	214803-007		Water	154973	09/22/09 19:21	1.0		
061	264_061	SAMPLE	214803-008		Water	154973	09/22/09 19:52	1.0		
062	264_062	X	CMARKER				09/22/09 20:22	1.0	1	
063	264_063	CCV	DSL_250				09/22/09 20:53	1.0	2	
064	264_064	CCV	MO_500				09/22/09 21:23	1.0	3	
065	264_065	SAMPLE	214803-009		Water	154973	09/22/09 22:10	1.0		
066	264_066	SAMPLE	214803-010		Water	154973	09/22/09 22:41	1.0		
067	264_067	SAMPLE	214816-008		Soil	155134	09/22/09 23:12	1.0		
068	264_068	SAMPLE	214816-009		Soil	155134	09/22/09 23:42	1.0		
069	264_069	SAMPLE	214816-010		Soil	155134	09/23/09 00:13	1.0		
070	264_070	SAMPLE	214816-017		Soil	155134	09/23/09 00:44	1.0		
071	264_071	SAMPLE	214816-018		Soil	155134	09/23/09 01:15	1.0		
072	264_072	SAMPLE	214816-019		Soil	155134	09/23/09 01:46	1.0		
073	264_073	SAMPLE	214851-005		Water	155075	09/23/09 02:17	1.0		
074	264_074	SAMPLE	214851-010		Water	155075	09/23/09 02:48	1.0		
075	264_075	CCV	DSL_500				09/23/09 03:19	1.0	5	
076	264_076	CCV	MO_500				09/23/09 03:50	1.0	3	
077	264_077	X	CCV				09/23/09 04:21	1.0	5	
078	264_078	X	CCV				09/23/09 04:52	1.0	3	
079	264_079	SAMPLE	214851-011		Water	155075	09/23/09 05:24	1.0		
080	264_080	SAMPLE	214851-012		Water	155075	09/23/09 05:55	1.0		
081	264_081	SAMPLE	214851-013		Water	155075	09/23/09 06:26	1.0		
082	264_082	SAMPLE	214851-003		Water	155075	09/23/09 06:56	1.0		
083	264_083	X	CMARKER				09/23/09 07:26	1.0	1	
084	264_084	CCV	DSL_1000				09/23/09 07:57	1.0	4	
085	264_085	CCV	MO_500				09/23/09 08:27	1.0	3	
086	264_086	X	CCV				09/23/09 11:57	1.0	4	
087	264_087	X	CCV				09/23/09 12:28	1.0	3	

TFB 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 3 through 8.

TFB 09/21/09 : Runs 1-2 did not run.

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 9 through 40.

TFB 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 41 through 87.

Standards used: 1=S11825 2=S12545 3=S12822 4=S12547 5=S12546

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 979364016

Instrument : GC27A Begun : 09/09/09 18:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	252a001	X	PRIMER			09/09/09 18:56	1.0		
002	252a002	X	IB			09/09/09 19:21	1.0		
003	252a003	X	CMARKER			09/09/09 19:47	1.0	1	
004	252a004	CCV	DSL_500			09/09/09 20:12	1.0	2	
005	252a005	CCV	MO_500			09/09/09 20:37	1.0	3	
006	252a006	CCV	DSL_500			09/09/09 21:10	1.0	2	
007	252a007	CCV	MO_500			09/09/09 21:35	1.0	3	
009	252a009	IB	CALIB			09/09/09 22:36	1.0		
010	252a010	ICAL	HEXOTP_5			09/09/09 23:02	1.0	4	
011	252a011	ICAL	HEXOTP_10			09/09/09 23:27	1.0	5	
012	252a012	ICAL	HEXOTP_25			09/09/09 23:52	1.0	6	
013	252a013	ICAL	HEXOTP_50			09/10/09 00:18	1.0	7	
014	252a014	ICAL	HEXOTP_100			09/10/09 00:43	1.0	8	
015	252a015	ICAL	HEXOTP_200			09/10/09 01:09	1.0	9	
016	252a016	IB	CALIB			09/10/09 01:34	1.0		
017	252a017	ICAL	DSL_10			09/10/09 01:59	1.0	10	
018	252a018	ICAL	DSL_100			09/10/09 02:25	1.0	11	
019	252a019	ICAL	DSL_500			09/10/09 02:50	1.0	12	
020	252a020	ICAL	DSL_1000			09/10/09 03:16	1.0	13	
021	252a021	ICAL	DSL_5000			09/10/09 03:41	1.0	14	
022	252a022	ICAL	DSL_7500			09/10/09 04:07	1.0	15	
023	252a023	IB	CALIB			09/10/09 04:32	1.0		
024	252a024	ICV	DSL_500			09/10/09 04:58	1.0	2	
025	252a025	X	ICV			09/10/09 05:23	1.0	2	
026	252a026	IB	CALIB			09/10/09 05:49	1.0		
027	252a027	ICAL	MO_25			09/10/09 06:15	1.0	16	
028	252a028	ICAL	MO_50			09/10/09 06:40	1.0	16	
029	252a029	ICAL	MO_250			09/10/09 07:05	1.0	17	
030	252a030	ICAL	MO_500			09/10/09 07:30	1.0	18	
031	252a031	ICAL	MO_1000			09/10/09 07:56	1.0	19	
032	252a032	ICAL	MO_2500			09/10/09 08:21	1.0	20	
033	252a033	ICAL	MO_5000			09/10/09 08:46	1.0	20	
034	252a034	IB	CALIB			09/10/09 09:12	1.0		
035	252a035	CMARKER	C8-C50			09/10/09 09:37	1.0	1	

Analyst: JDG Date: 09/10/09 Reviewer: EAH Date: 09/11/09

Standards used: 1=S12636 2=S12546 3=S12687 4=S12539 5=S12540 6=S12541 7=S12542 8=S12543 9=S12544 10=S11869 11=S11870 12=S11871 13=S11872 14=S11868 15=S11873 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 979376820

Instrument : GC27A Begun : 09/18/09 16:20
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	261a001	X	PRIMER				09/18/09 16:20	1.0		
002	261a002	X	IB				09/18/09 16:45	1.0		
003	261a003	X	CMARKER				09/18/09 17:11	1.0	1	
004	261a004	X	CCV				09/18/09 17:36	1.0	2	
005	261a005	CCV	DSL_250				09/18/09 18:18	1.0	3	
006	261a006	MS	QC512522	S	Soil	155030	09/18/09 19:09	5.0		
007	261a007	MSD	QC512523	S	Soil	155030	09/18/09 19:35	5.0		
008	261a008	X	IB				09/18/09 20:00	1.0		
009	261a009	LCS	QC512521	S	Soil	155030	09/18/09 20:26	1.0		
010	261a010	MS	QC512303		Water	154973	09/18/09 20:51	1.0		
011	261a011	MSD	QC512304		Water	154973	09/18/09 21:17	1.0		
012	261a012	SAMPLE	214885-001		Water	154973	09/18/09 21:42	1.0		
013	261a013	SAMPLE	214885-002		Water	154973	09/18/09 22:07	1.0		
014	261a014	SAMPLE	214885-003		Water	154973	09/18/09 22:33	1.0		
015	261a015	CCV	DSL_500				09/18/09 22:58	1.0	2	
016	261a016	X	CCV				09/18/09 23:24	1.0	3	

JDG 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 16.

Standards used: 1=S12636 2=S12546 3=S12545

SAMPLE PREPARATION SUMMARY

Batch # : 154973 Analysis : TEH
Started By : DJT Prep Date : 16-SEP-2009 17:00 Finished By : TWY
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12895 Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214803-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-006		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-008		Water	500	2.5	1	0.005	7	.5				TEHM	
214803-009		Water	500	2.5	1	0.005	5	.5				TEHM	
214803-010		Water	500	2.5	1	0.005	7	.5				TEHM	
214858-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	Prepped 16-SEP-2009 18:50
214858-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	Prepped 16-SEP-2009 18:50
214880-001		Water	500	2.5	1	0.005	7	.5				TEH	
214880-002		Water	500	2.5	1	0.005	7	.5				TEH	
214880-003		Water	500	2.5	1	0.005	7	.5				TEH	
214885-001		Water	500	2.5	1	0.005	7	.5				TEH	Prepped 16-SEP-2009 18:50
214885-002		Water	500	2.5	1	0.005	7	.5				TEH	Prepped 16-SEP-2009 18:50
214885-003		Water	500	2.5	1	0.005	7	.5				TEH	Prepped 16-SEP-2009 18:50
214903-001		Water	500	2.5	1	0.005	7	.5				TEHM	
214947-001		Water	500	2.5	1	0.005	7	.5				TEH	Prepped 16-SEP-2009 18:50
214947-002		Water	500	2.5	1	0.005	7	.5				TEH	Prepped 16-SEP-2009 18:50
QC512301	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC512302	LCS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC512303	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC512304	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC512305	LCS	Water	500	2.5	1	0.005		.5		.5			

JDG 09/21/09 : Reviewed for all jobs except for 214903 (needs SG) and 214947 (MS/MSD needs a HEX CCV)

TFB 09/21/09 : reviewed twice.

Analyst: JDG Date: 09/23/09 Reviewer: TFB Date: 09/23/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

Page 40 BK 2909

LIMS Batch No: 154973
LIMS Analysis: TEH/M
Date Extracted: 9/16/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☐ EPA 3630c Silica Ge

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214803-002	B	500	7	2.5		
003	C					
004	D					
005	J					MSS
006	D					
007	B					
008	↓		↓			
009	D		5			
010	↓		7			
214880-001	H					
002	↓					
003	C					
214903-001	I		↓		X	insufficient sample
MB QC512301	NA		NA		✓	
LCS 2	↓		↓		✓	
MS 3	K		7			
MSD 4	↓		↓			
LCS 5	NA		NA			
** 214947-001	A	500	7			
002	↓	↓				
214858-002	G	500			X	
003	I				✓	
214885-001	G					
002						
003	↓	↓	↓	↓		

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129340	DJT 9/16/09
0.5 mL of TEH_SP was added to all spikes	S12895c / S12290c*	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS086519	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM449182	
Extraction Start Time:	1700 / 1850 **	
Extraction End Time:	1116 / 1250	DJC 9/17/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	9/17/09 TWY
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	SM49007904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/16/09
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

9/21/09
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: TWY
Cleanup Date: 9/17/09 (logged on 9/18/09)

Benchbook # **BK 2939**
Page 8

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
214840-001	154927	1.0	1.0	MSS
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
MB QC512111				
LCS 2				
MS 3				
MSD 4				
MB QC512301	154973			
LCS 2				
214855-002				
-003				
				9/18/09 JPG

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	TWY 9/18/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11910	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM49182	
Concentrated to volumes as noted above	✓	

9/18/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

TFB 9/18/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: SFL
Cleanup Date: 9/18/09

Benchbook # **BK 2939**
Page 9

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
214947-002	154973	1.0	1.0	re-SOT
				SOT 9/21/09

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	SFL 9/18/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP1190	
Extracts were eluted with 40 mL CH_2Cl_2	EM4982	
Concentrated to volumes as noted above		

9/18/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

9/21/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KKM
Cleanup Date: 9/22/09

Benchbook # **BK 2939**
Page 16

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
214873·001	155038	1.0	1.0	
002				
003				
004				
005				
006				
007				
008				
214876·010				
011				
012				
013				
214877·009				
010				
011				
012				
MB GC512 557				
LCS 58				
MS 59				
MSD 60				
MS 61				
MSP 62				
214903·001	154973 KKM 9/22/09	1.0		
	TFB 9/22/09			

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ____g columns	NA	KKM 9/22/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11910	
Extracts were eluted with 40 mL CH_2Cl_2	6MB49182	
Concentrated to volumes as noted above	✓	

KKM 9/22/09
Extraction Chemist / Date

Continued from page ____
Continued on page ____

TFB 9/22/09
Reviewed by / Date

Laboratory Job Number 214803

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090909B	Batch#:	155093
Lab ID:	214803-001	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090909B	Batch#:	155093
Lab ID:	214803-001	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-125A-9C1	Batch#:	155093
Lab ID:	214803-002	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-125A-9C1	Batch#:	155093
Lab ID:	214803-002	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-9C1	Batch#:	155093
Lab ID:	214803-003	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	16	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-9C1	Batch#:	155093
Lab ID:	214803-003	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-96A-9C1	Batch#:	155111
Lab ID:	214803-004	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	65	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-96A-9C1	Batch#:	155111
Lab ID:	214803-004	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	125 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 M1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-122A-9C1	Batch#:	155093
Lab ID:	214803-006	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-122A-9C1	Batch#:	155093
Lab ID:	214803-006	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-106A-9C1	Batch#:	155093
Lab ID:	214803-007	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	1.1	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-106A-9C1	Batch#:	155093
Lab ID:	214803-007	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-124A-9C1	Batch#:	155093
Lab ID:	214803-008	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	21	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-124A-9C1	Batch#:	155093
Lab ID:	214803-008	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-511-9C1	Batch#:	155093
Lab ID:	214803-009	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-511-9C1	Batch#:	155093
Lab ID:	214803-009	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-509-9C1	Batch#:	155093
Lab ID:	214803-010	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	21	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-509-9C1	Batch#:	155093
Lab ID:	214803-010	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512764	Batch#:	155093
Matrix:	Water	Analyzed:	09/19/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512764	Batch#:	155093
Matrix:	Water	Analyzed:	09/19/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512765

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	23.59	94	56-140	
Chloromethane	25.00	22.02	88	46-142	
Vinyl Chloride	25.00	22.44	90	49-136	
Bromomethane	25.00	24.61	98	42-154	
Chloroethane	25.00	24.49	98	51-133	
Trichlorofluoromethane	25.00	22.33	89	63-135	
Iodomethane	25.00	29.83	119	70-130	
Acetone	25.00	23.21	93	48-130	
1,1-Dichloroethene	25.00	25.59	102	68-133	
Methylene Chloride	25.00	24.57	98	71-120	
Carbon Disulfide	25.00	24.10	96	56-120	
MTBE	25.00	24.17	97	58-120	
trans-1,2-Dichloroethene	25.00	26.37	105	80-120	
Vinyl Acetate	25.00	24.32	97	63-124	
1,1-Dichloroethane	25.00	25.96	104	77-120	
2-Butanone	25.00	23.77	95	57-120	
cis-1,2-Dichloroethene	25.00	24.29	97	75-120	
2,2-Dichloropropane	25.00	26.59	106	72-128	
Chloroform	25.00	23.80	95	78-120	
Bromochloromethane	25.00	24.94	100	78-120	
1,1,1-Trichloroethane	25.00	25.90	104	78-120	
1,1-Dichloropropene	25.00	25.63	103	75-120	
Carbon Tetrachloride	25.00	25.06	100	80-120	
1,2-Dichloroethane	25.00	24.44	98	74-120	
Benzene	25.00	25.48	102	77-120	
Trichloroethene	25.00	24.68	99	78-122	
1,2-Dichloropropane	25.00	25.00	100	76-120	
Bromodichloromethane	25.00	25.12	100	78-120	
Dibromomethane	25.00	24.46	98	77-120	
4-Methyl-2-Pentanone	25.00	22.29	89	65-120	
cis-1,3-Dichloropropene	25.00	26.62	106	76-120	
Toluene	25.00	24.68	99	73-120	
trans-1,3-Dichloropropene	25.00	23.43	94	72-120	
1,1,2-Trichloroethane	25.00	25.59	102	76-120	
2-Hexanone	25.00	21.47	86	57-121	
1,3-Dichloropropane	25.00	25.68	103	75-120	
Tetrachloroethene	25.00	23.53	94	77-120	
Dibromochloromethane	25.00	24.52	98	76-120	
1,2-Dibromoethane	25.00	24.39	98	77-120	
Chlorobenzene	25.00	24.12	96	78-120	
1,1,1,2-Tetrachloroethane	25.00	23.61	94	77-120	
Ethylbenzene	25.00	25.32	101	78-120	
m,p-Xylenes	50.00	52.16	104	77-120	
o-Xylene	25.00	25.00	100	77-120	
Styrene	25.00	25.99	104	77-120	
Bromoform	25.00	22.77	91	74-121	
Isopropylbenzene	25.00	22.12	88	71-120	
1,1,2,2-Tetrachloroethane	25.00	24.35	97	73-120	
1,2,3-Trichloropropane	25.00	25.52	102	72-120	
Propylbenzene	25.00	25.51	102	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	22.92	92	75-120	
1,3,5-Trimethylbenzene	25.00	25.68	103	77-120	
2-Chlorotoluene	25.00	25.50	102	76-120	
4-Chlorotoluene	25.00	25.00	100	78-120	
tert-Butylbenzene	25.00	24.03	96	76-120	
1,2,4-Trimethylbenzene	25.00	25.62	102	77-120	
sec-Butylbenzene	25.00	24.26	97	80-120	
para-Isopropyl Toluene	25.00	23.63	95	76-120	
1,3-Dichlorobenzene	25.00	23.80	95	75-120	
1,4-Dichlorobenzene	25.00	23.58	94	77-120	
n-Butylbenzene	25.00	31.05 b	124 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	24.35	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.38	98	65-120	
1,2,4-Trichlorobenzene	25.00	22.00	88	73-121	
Hexachlorobutadiene	25.00	23.54	94	73-123	
Naphthalene	25.00	23.85	95	62-121	
1,2,3-Trichlorobenzene	25.00	23.34	93	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	24.76	99	56-140	5	24	
Chloromethane	25.00	22.24	89	46-142	1	24	
Vinyl Chloride	25.00	22.87	91	49-136	2	24	
Bromomethane	25.00	26.43	106	42-154	7	24	
Chloroethane	25.00	24.83	99	51-133	1	25	
Trichlorofluoromethane	25.00	22.50	90	63-135	1	20	
Iodomethane	25.00	32.18	129	70-130	8	20	
Acetone	25.00	22.31	89	48-130	4	41	
1,1-Dichloroethene	25.00	26.02	104	68-133	2	20	
Methylene Chloride	25.00	24.29	97	71-120	1	20	
Carbon Disulfide	25.00	24.46	98	56-120	2	20	
MTBE	25.00	24.31	97	58-120	1	21	
trans-1,2-Dichloroethene	25.00	26.76	107	80-120	1	24	
Vinyl Acetate	25.00	23.88	96	63-124	2	24	
1,1-Dichloroethane	25.00	25.93	104	77-120	0	20	
2-Butanone	25.00	23.10	92	57-120	3	32	
cis-1,2-Dichloroethene	25.00	24.71	99	75-120	2	20	
2,2-Dichloropropane	25.00	26.54	106	72-128	0	24	
Chloroform	25.00	23.69	95	78-120	0	20	
Bromochloromethane	25.00	24.53	98	78-120	2	20	
1,1,1-Trichloroethane	25.00	26.18	105	78-120	1	20	
1,1-Dichloropropene	25.00	26.20	105	75-120	2	21	
Carbon Tetrachloride	25.00	25.16	101	80-120	0	21	
1,2-Dichloroethane	25.00	23.92	96	74-120	2	20	
Benzene	25.00	25.65	103	77-120	1	20	
Trichloroethene	25.00	24.84	99	78-122	1	20	
1,2-Dichloropropane	25.00	24.78	99	76-120	1	20	
Bromodichloromethane	25.00	24.71	99	78-120	2	20	
Dibromomethane	25.00	24.06	96	77-120	2	20	
4-Methyl-2-Pentanone	25.00	22.68	91	65-120	2	22	
cis-1,3-Dichloropropene	25.00	26.35	105	76-120	1	20	
Toluene	25.00	25.11	100	73-120	2	20	
trans-1,3-Dichloropropene	25.00	23.63	95	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.71	103	76-120	0	20	
2-Hexanone	25.00	22.30	89	57-121	4	25	
1,3-Dichloropropane	25.00	25.66	103	75-120	0	20	
Tetrachloroethene	25.00	24.43	98	77-120	4	20	
Dibromochloromethane	25.00	24.70	99	76-120	1	20	
1,2-Dibromoethane	25.00	24.72	99	77-120	1	20	
Chlorobenzene	25.00	24.57	98	78-120	2	20	
1,1,1,2-Tetrachloroethane	25.00	24.24	97	77-120	3	20	
Ethylbenzene	25.00	25.87	103	78-120	2	26	
m,p-Xylenes	50.00	53.24	106	77-120	2	20	
o-Xylene	25.00	25.41	102	77-120	2	20	
Styrene	25.00	26.22	105	77-120	1	20	
Bromoform	25.00	23.07	92	74-121	1	21	
Isopropylbenzene	25.00	23.31	93	71-120	5	20	
1,1,2,2-Tetrachloroethane	25.00	25.11	100	73-120	3	20	
1,2,3-Trichloropropane	25.00	25.85	103	72-120	1	20	
Propylbenzene	25.00	26.63	107	76-120	4	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	25.00	23.78	95	75-120	4	20	
1,3,5-Trimethylbenzene	25.00	26.34	105	77-120	3	20	
2-Chlorotoluene	25.00	26.49	106	76-120	4	20	
4-Chlorotoluene	25.00	25.83	103	78-120	3	20	
tert-Butylbenzene	25.00	25.11	100	76-120	4	21	
1,2,4-Trimethylbenzene	25.00	26.23	105	77-120	2	20	
sec-Butylbenzene	25.00	24.95	100	80-120	3	21	
para-Isopropyl Toluene	25.00	23.63	95	76-120	0	20	
1,3-Dichlorobenzene	25.00	24.56	98	75-120	3	20	
1,4-Dichlorobenzene	25.00	24.29	97	77-120	3	23	
n-Butylbenzene	25.00	31.46 b	126 *	76-120	1	21	L1 V3
1,2-Dichlorobenzene	25.00	24.82	99	76-120	2	20	
1,2-Dibromo-3-Chloropropane	25.00	25.85	103	65-120	6	22	
1,2,4-Trichlorobenzene	25.00	22.84	91	73-121	4	20	
Hexachlorobutadiene	25.00	23.75	95	73-123	1	25	
Naphthalene	25.00	24.99	100	62-121	5	32	
1,2,3-Trichlorobenzene	25.00	24.03	96	66-123	3	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Type: MS Lab ID: QC512786

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	26.75	107	56-140	
Chloromethane	<0.2000	25.00	24.84	99	46-142	
Vinyl Chloride	<0.1000	25.00	25.13	101	49-136	
Bromomethane	<0.2000	25.00	30.31	121	42-154	
Chloroethane	<0.2000	25.00	26.67	107	51-133	
Trichlorofluoromethane	<0.2000	25.00	26.11	104	63-135	
Iodomethane	<2.000	25.00	31.12	124	60-140	
Acetone	<1.000	25.00	23.53	94	48-130	
1,1-Dichloroethene	<0.1000	25.00	25.21	101	68-133	
Methylene Chloride	0.1289	25.00	25.27	101	71-120	
Carbon Disulfide	<0.1000	25.00	23.31	93	56-120	
MTBE	<0.1000	25.00	24.27	97	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	27.21	109	80-120	
Vinyl Acetate	<2.000	25.00	22.15	89	63-124	
1,1-Dichloroethane	<0.1000	25.00	27.02	108	77-120	
2-Butanone	<2.000	25.00	24.44	98	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	25.62	102	75-120	
2,2-Dichloropropane	<0.1000	25.00	24.54	98	72-128	
Chloroform	0.1441	25.00	25.10	100	78-120	
Bromochloromethane	<0.1000	25.00	25.90	104	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	27.20	109	78-120	
1,1-Dichloropropene	<0.1000	25.00	25.77	103	75-120	
Carbon Tetrachloride	<0.1000	25.00	25.05	100	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.01	100	74-120	
Benzene	<0.1000	25.00	26.24	105	77-120	
Trichloroethene	<0.1000	25.00	25.70	103	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.57	102	76-120	
Bromodichloromethane	<0.1000	25.00	25.83	103	78-120	
Dibromomethane	<0.1000	25.00	24.66	99	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	22.75	91	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	26.62	106	76-120	
Toluene	<0.1000	25.00	25.43	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.57	94	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	26.09	104	76-120	
2-Hexanone	<2.000	25.00	22.17	89	57-121	
1,3-Dichloropropane	<0.1000	25.00	26.20	105	75-120	
Tetrachloroethene	0.1400	25.00	24.23	96	77-120	
Dibromochloromethane	<0.1000	25.00	25.15	101	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.90	100	77-120	
Chlorobenzene	<0.1000	25.00	24.85	99	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.74	99	77-120	
Ethylbenzene	<0.1000	25.00	26.45	106	78-120	
m,p-Xylenes	<0.1594	50.00	54.36	109	77-120	
o-Xylene	<0.1000	25.00	26.40	106	77-120	
Styrene	<0.1000	25.00	25.96	104	77-120	
Bromoform	<0.2000	25.00	23.08	92	74-121	
Isopropylbenzene	<0.1000	25.00	23.25	93	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	24.97	100	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.29	105	72-120	
Propylbenzene	<0.1000	25.00	27.03	108	76-120	
Bromobenzene	<0.1000	25.00	23.77	95	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.33	105	77-120	
2-Chlorotoluene	<0.1000	25.00	26.95	108	76-120	
4-Chlorotoluene	<0.1000	25.00	26.47	106	78-120	
tert-Butylbenzene	<0.1000	25.00	25.66	103	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.15	105	77-120	
sec-Butylbenzene	<0.1029	25.00	25.37	101	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.88	96	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.85	99	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.77	99	77-120	
n-Butylbenzene	<0.1285	25.00	30.17 b	121 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	25.10	100	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.93	100	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	22.05	88	73-121	
Hexachlorobutadiene	<0.4000	25.00	23.37	93	73-123	
Naphthalene	<0.4000	25.00	24.55	98	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	23.42	94	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC512787

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	26.42	106	56-140	1	24	
Chloromethane	25.00	23.40	94	46-142	6	24	
Vinyl Chloride	25.00	24.42	98	49-136	3	24	
Bromomethane	25.00	28.79	115	42-154	5	24	
Chloroethane	25.00	25.33	101	51-133	5	25	
Trichlorofluoromethane	25.00	23.73	95	63-135	10	20	
Iodomethane	25.00	30.68	123	60-140	1	30	
Acetone	25.00	23.80	95	48-130	1	41	
1,1-Dichloroethene	25.00	23.85	95	68-133	6	20	
Methylene Chloride	25.00	24.20	96	71-120	4	20	
Carbon Disulfide	25.00	21.82	87	56-120	7	20	
MTBE	25.00	23.52	94	58-120	3	21	
trans-1,2-Dichloroethene	25.00	25.60	102	80-120	6	24	
Vinyl Acetate	25.00	20.81	83	63-124	6	24	
1,1-Dichloroethane	25.00	25.15	101	77-120	7	20	
2-Butanone	25.00	23.30	93	57-120	5	32	
cis-1,2-Dichloroethene	25.00	24.37	97	75-120	5	20	
2,2-Dichloropropane	25.00	22.65	91	72-128	8	24	
Chloroform	25.00	23.40	93	78-120	7	20	
Bromochloromethane	25.00	24.72	99	78-120	5	20	
1,1,1-Trichloroethane	25.00	25.08	100	78-120	8	20	
1,1-Dichloropropene	25.00	24.41	98	75-120	5	21	
Carbon Tetrachloride	25.00	23.46	94	80-120	7	21	
1,2-Dichloroethane	25.00	23.71	95	74-120	5	20	
Benzene	25.00	24.88	100	77-120	5	20	
Trichloroethene	25.00	24.21	97	78-122	6	20	
1,2-Dichloropropane	25.00	24.51	98	76-120	4	20	
Bromodichloromethane	25.00	24.71	99	78-120	4	20	
Dibromomethane	25.00	23.97	96	77-120	3	20	
4-Methyl-2-Pentanone	25.00	22.64	91	65-120	1	22	
cis-1,3-Dichloropropene	25.00	25.63	103	76-120	4	20	
Toluene	25.00	24.41	98	73-120	4	20	
trans-1,3-Dichloropropene	25.00	22.86	91	72-120	3	20	
1,1,2-Trichloroethane	25.00	25.31	101	76-120	3	20	
2-Hexanone	25.00	22.44	90	57-121	1	25	
1,3-Dichloropropane	25.00	25.60	102	75-120	2	20	
Tetrachloroethene	25.00	22.79	91	77-120	6	20	
Dibromochloromethane	25.00	24.36	97	76-120	3	20	
1,2-Dibromoethane	25.00	24.64	99	77-120	1	20	
Chlorobenzene	25.00	23.97	96	78-120	4	20	
1,1,1,2-Tetrachloroethane	25.00	23.74	95	77-120	4	20	
Ethylbenzene	25.00	25.12	100	78-120	5	26	
m,p-Xylenes	50.00	51.87	104	77-120	5	20	
o-Xylene	25.00	25.16	101	77-120	5	20	
Styrene	25.00	25.03	100	77-120	4	20	
Bromoform	25.00	22.77	91	74-121	1	21	
Isopropylbenzene	25.00	22.26	89	71-120	4	20	
1,1,2,2-Tetrachloroethane	25.00	25.01	100	73-120	0	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	25.95	104	72-120	1	20	
Propylbenzene	25.00	25.27	101	76-120	7	20	
Bromobenzene	25.00	23.31	93	75-120	2	20	
1,3,5-Trimethylbenzene	25.00	25.01	100	77-120	5	20	
2-Chlorotoluene	25.00	25.68	103	76-120	5	20	
4-Chlorotoluene	25.00	25.21	101	78-120	5	20	
tert-Butylbenzene	25.00	23.68	95	76-120	8	21	
1,2,4-Trimethylbenzene	25.00	24.62	98	77-120	6	20	
sec-Butylbenzene	25.00	23.23	93	80-120	9	21	
para-Isopropyl Toluene	25.00	22.16	89	76-120	7	20	
1,3-Dichlorobenzene	25.00	23.87	95	75-120	4	20	
1,4-Dichlorobenzene	25.00	23.64	95	77-120	5	23	
n-Butylbenzene	25.00	27.04 b	108	76-120	11	21	V3
1,2-Dichlorobenzene	25.00	24.11	96	76-120	4	20	
1,2-Dibromo-3-Chloropropane	25.00	25.24	101	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	21.24	85	73-121	4	20	
Hexachlorobutadiene	25.00	21.86	87	73-123	7	25	
Naphthalene	25.00	24.32	97	62-121	1	32	
1,2,3-Trichlorobenzene	25.00	22.90	92	66-123	2	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512854

Analyte	Spiked	Result		%REC	Limits	ADEQ Flags
Freon 12	25.00	25.68		103	56-140	
Chloromethane	25.00	20.66		83	46-142	
Vinyl Chloride	25.00	22.17		89	49-136	
Bromomethane	25.00	29.74		119	42-154	
Chloroethane	25.00	26.45		106	51-133	
Trichlorofluoromethane	25.00	23.30		93	63-135	
Iodomethane	25.00	31.55	b	126	70-130	V3
Acetone	25.00	22.36		89	48-130	
1,1-Dichloroethene	25.00	25.64		103	68-133	
Methylene Chloride	25.00	24.95		100	71-120	
Carbon Disulfide	25.00	23.32		93	56-120	
MTBE	25.00	23.63		95	58-120	
trans-1,2-Dichloroethene	25.00	27.58		110	80-120	
Vinyl Acetate	25.00	22.45		90	63-124	
1,1-Dichloroethane	25.00	26.06		104	77-120	
2-Butanone	25.00	22.75		91	57-120	
cis-1,2-Dichloroethene	25.00	25.79		103	75-120	
2,2-Dichloropropane	25.00	26.34		105	72-128	
Chloroform	25.00	24.18		97	78-120	
Bromochloromethane	25.00	26.08		104	78-120	
1,1,1-Trichloroethane	25.00	25.53		102	78-120	
1,1-Dichloropropene	25.00	25.63		103	75-120	
Carbon Tetrachloride	25.00	24.19		97	80-120	
1,2-Dichloroethane	25.00	22.68		91	74-120	
Benzene	25.00	26.02		104	77-120	
Trichloroethene	25.00	25.58		102	78-122	
1,2-Dichloropropane	25.00	25.18		101	76-120	
Bromodichloromethane	25.00	25.19		101	78-120	
Dibromomethane	25.00	24.36		97	77-120	
4-Methyl-2-Pentanone	25.00	21.13		85	65-120	
cis-1,3-Dichloropropene	25.00	27.18		109	76-120	
Toluene	25.00	25.71		103	73-120	
trans-1,3-Dichloropropene	25.00	23.73		95	72-120	
1,1,2-Trichloroethane	25.00	25.94		104	76-120	
2-Hexanone	25.00	20.92		84	57-121	
1,3-Dichloropropane	25.00	25.85		103	75-120	
Tetrachloroethene	25.00	24.86		99	77-120	
Dibromochloromethane	25.00	25.56		102	76-120	
1,2-Dibromoethane	25.00	25.39		102	77-120	
Chlorobenzene	25.00	25.46		102	78-120	
1,1,1,2-Tetrachloroethane	25.00	25.13		101	77-120	
Ethylbenzene	25.00	26.37		105	78-120	
m,p-Xylenes	50.00	54.96		110	77-120	
o-Xylene	25.00	26.50		106	77-120	
Styrene	25.00	27.35		109	77-120	
Bromoform	25.00	23.51		94	74-121	
Isopropylbenzene	25.00	23.97		96	71-120	
1,1,2,2-Tetrachloroethane	25.00	24.98		100	73-120	
1,2,3-Trichloropropane	25.00	25.65		103	72-120	
Propylbenzene	25.00	27.15		109	76-120	
Bromobenzene	25.00	25.10		100	75-120	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	26.42	106	77-120	
2-Chlorotoluene	25.00	27.21	109	76-120	
4-Chlorotoluene	25.00	26.82	107	78-120	
tert-Butylbenzene	25.00	25.45	102	76-120	
1,2,4-Trimethylbenzene	25.00	25.77	103	77-120	
sec-Butylbenzene	25.00	25.03	100	80-120	
para-Isopropyl Toluene	25.00	23.38	94	76-120	
1,3-Dichlorobenzene	25.00	25.78	103	75-120	
1,4-Dichlorobenzene	25.00	25.39	102	77-120	
n-Butylbenzene	25.00	29.17	117	76-120	
1,2-Dichlorobenzene	25.00	25.93	104	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.50	98	65-120	
1,2,4-Trichlorobenzene	25.00	22.56	90	73-121	
Hexachlorobutadiene	25.00	23.09	92	73-123	
Naphthalene	25.00	24.74	99	62-121	
1,2,3-Trichlorobenzene	25.00	23.56	94	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	99	78-120	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512855

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	22.81	91	56-140	12	24	
Chloromethane	25.00	20.39	82	46-142	1	24	
Vinyl Chloride	25.00	21.18	85	49-136	5	24	
Bromomethane	25.00	29.31	117	42-154	1	24	
Chloroethane	25.00	24.13	97	51-133	9	25	
Trichlorofluoromethane	25.00	21.51	86	63-135	8	20	
Iodomethane	25.00	31.53 b	126	70-130	0	20	V3
Acetone	25.00	20.83	83	48-130	7	41	
1,1-Dichloroethene	25.00	24.04	96	68-133	6	20	
Methylene Chloride	25.00	23.72	95	71-120	5	20	
Carbon Disulfide	25.00	21.45	86	56-120	8	20	
MTBE	25.00	23.08	92	58-120	2	21	
trans-1,2-Dichloroethene	25.00	25.51	102	80-120	8	24	
Vinyl Acetate	25.00	21.75	87	63-124	3	24	
1,1-Dichloroethane	25.00	24.09	96	77-120	8	20	
2-Butanone	25.00	21.85	87	57-120	4	32	
cis-1,2-Dichloroethene	25.00	24.33	97	75-120	6	20	
2,2-Dichloropropane	25.00	24.10	96	72-128	9	24	
Chloroform	25.00	22.34	89	78-120	8	20	
Bromochloromethane	25.00	24.77	99	78-120	5	20	
1,1,1-Trichloroethane	25.00	23.63	95	78-120	8	20	
1,1-Dichloropropene	25.00	23.64	95	75-120	8	21	
Carbon Tetrachloride	25.00	22.26	89	80-120	8	21	
1,2-Dichloroethane	25.00	21.40	86	74-120	6	20	
Benzene	25.00	24.32	97	77-120	7	20	
Trichloroethene	25.00	23.77	95	78-122	7	20	
1,2-Dichloropropane	25.00	23.47	94	76-120	7	20	
Bromodichloromethane	25.00	23.47	94	78-120	7	20	
Dibromomethane	25.00	23.27	93	77-120	5	20	
4-Methyl-2-Pentanone	25.00	20.56	82	65-120	3	22	
cis-1,3-Dichloropropene	25.00	25.48	102	76-120	6	20	
Toluene	25.00	23.83	95	73-120	8	20	
trans-1,3-Dichloropropene	25.00	22.30	89	72-120	6	20	
1,1,2-Trichloroethane	25.00	24.82	99	76-120	4	20	
2-Hexanone	25.00	20.12	80	57-121	4	25	
1,3-Dichloropropane	25.00	24.71	99	75-120	4	20	
Tetrachloroethene	25.00	23.06	92	77-120	8	20	
Dibromochloromethane	25.00	24.15	97	76-120	6	20	
1,2-Dibromoethane	25.00	24.14	97	77-120	5	20	
Chlorobenzene	25.00	23.71	95	78-120	7	20	
1,1,1,2-Tetrachloroethane	25.00	23.34	93	77-120	7	20	
Ethylbenzene	25.00	24.19	97	78-120	9	26	
m,p-Xylenes	50.00	50.78	102	77-120	8	20	
o-Xylene	25.00	24.55	98	77-120	8	20	
Styrene	25.00	25.42	102	77-120	7	20	
Bromoform	25.00	22.51	90	74-121	4	21	
Isopropylbenzene	25.00	22.15	89	71-120	8	20	
1,1,2,2-Tetrachloroethane	25.00	24.37	97	73-120	3	20	
1,2,3-Trichloropropane	25.00	24.67	99	72-120	4	20	
Propylbenzene	25.00	24.91	100	76-120	9	20	
Bromobenzene	25.00	23.40	94	75-120	7	20	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	24.33	97	77-120	8	20	
2-Chlorotoluene	25.00	25.11	100	76-120	8	20	
4-Chlorotoluene	25.00	24.69	99	78-120	8	20	
tert-Butylbenzene	25.00	23.42	94	76-120	8	21	
1,2,4-Trimethylbenzene	25.00	23.91	96	77-120	7	20	
sec-Butylbenzene	25.00	23.05	92	80-120	8	21	
para-Isopropyl Toluene	25.00	21.74	87	76-120	7	20	
1,3-Dichlorobenzene	25.00	23.94	96	75-120	7	20	
1,4-Dichlorobenzene	25.00	23.75	95	77-120	7	23	
n-Butylbenzene	25.00	25.81	103	76-120	12	21	
1,2-Dichlorobenzene	25.00	24.11	96	76-120	7	20	
1,2-Dibromo-3-Chloropropane	25.00	23.55	94	65-120	4	22	
1,2,4-Trichlorobenzene	25.00	21.19	85	73-121	6	20	
Hexachlorobutadiene	25.00	21.43	86	73-123	7	25	
Naphthalene	25.00	23.78	95	62-121	4	32	
1,2,3-Trichlorobenzene	25.00	22.52	90	66-123	5	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	97	78-120	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512856	Batch#:	155111
Matrix:	Water	Analyzed:	09/21/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214803	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512856	Batch#:	155111
Matrix:	Water	Analyzed:	09/21/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	123 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS BFB TUNE FOR 214803 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214803 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839378097002 File : kij02 Time : 19-SEP-2009 14:43

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	27528	17.24	
75	30% - 60% of mass 95	79941	50.08	
95		159637	100.00	
96	5% - 9% of mass 95	11658	7.30	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	118600	74.29	
175	5% - 9% of mass 174	8746	7.37	
176	> 95% and < 101% of mass 174	114722	96.73	
177	5% - 9% of mass 176	7271	6.34	

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/21/09

CURTIS & TOMPKINS BFB TUNE FOR 214803 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839380641003 File : kil03 Time : 21-SEP-2009 08:39

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10920	16.10	
75	30% - 60% of mass 95	32652	48.15	
95		67815	100.00	
96	5% - 9% of mass 95	4617	6.81	
173	< 2% of mass 174	342	0.70	
174	> 50% and < 100% of mass 95	48712	71.83	
175	5% - 9% of mass 174	3453	7.09	
176	> 95% and < 101% of mass 174	47661	97.84	
177	5% - 9% of mass 176	3534	7.41	

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214803 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214803 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214803 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC512765 IDF : 1.0
Seqnum : 839378097003.2 File : kij03 Time : 19-SEP-2009 15:06
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5052	25.00	23.59	ug/L	-6	20	0.0500	u
Chloromethane	0.5160	0.4546	25.00	22.02	ug/L	-12	20	0.1000	u
Vinyl Chloride	0.5175	0.4645	25.00	22.44	ug/L	-10	20	0.0500	u
Bromomethane	0.2608	0.2567	25.00	24.61	ug/L	-2	20	0.0500	u
Chloroethane	0.4094	0.4011	25.00	24.49	ug/L	-2	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6624	25.00	22.33	ug/L	-11	20	0.0500	u
Iodomethane	0.2599	0.3172	25.00	29.83	ug/L	19	20	0.0500	u
Acetone	0.1382	0.1283	25.00	23.21	ug/L	-7	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3836	25.00	25.59	ug/L	2	20	0.0500	u
Methylene Chloride	0.5280	0.5190	25.00	24.57	ug/L	-2	20	0.0500	u
Carbon Disulfide	1.4090	1.3581	25.00	24.10	ug/L	-4	20	0.0500	u
MTBE	1.5447	1.4935	25.00	24.17	ug/L	-3	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.4815	25.00	26.37	ug/L	5	20	0.0500	u
Vinyl Acetate	0.9726	0.9463	25.00	24.32	ug/L	-3	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9765	25.00	25.96	ug/L	4	20	0.1000	u
2-Butanone	0.2331	0.2217	25.00	23.77	ug/L	-5	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5285	25.00	24.29	ug/L	-3	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7588	25.00	26.59	ug/L	6	20	0.0500	u
Chloroform	0.9238	0.8795	25.00	23.80	ug/L	-5	20	0.0500	u
Bromochloromethane	0.2354	0.2349	25.00	24.94	ug/L	0	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7286	25.00	25.90	ug/L	4	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4323	25.00	25.63	ug/L	3	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3492	25.00	25.06	ug/L	0	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4293	25.00	24.44	ug/L	-2	20	0.0500	u
Benzene	1.3404	1.3663	25.00	25.48	ug/L	2	20	0.0500	u
Trichloroethene	0.3158	0.3117	25.00	24.68	ug/L	-1	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3595	25.00	25.00	ug/L	0	20	0.0500	u
Bromodichloromethane	0.3863	0.3882	25.00	25.12	ug/L	0	20	0.0500	u
Dibromomethane	0.1802	0.1763	25.00	24.46	ug/L	-2	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2714	25.00	22.29	ug/L	-11	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5503	25.00	26.62	ug/L	6	20	0.0500	u
Toluene	0.9593	0.9471	25.00	24.68	ug/L	-1	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5371	25.00	23.43	ug/L	-6	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1790	25.00	25.59	ug/L	2	20	0.0500	u
2-Hexanone	0.2445	0.2100	25.00	21.47	ug/L	-14	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6300	25.00	25.68	ug/L	3	20	0.0500	u
Tetrachloroethene	0.3329	0.3133	25.00	23.53	ug/L	-6	20	0.0500	u
Dibromochloromethane	0.3027	0.2969	25.00	24.52	ug/L	-2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2974	25.00	24.39	ug/L	-2	20	0.0500	u
Chlorobenzene	1.0519	1.0149	25.00	24.12	ug/L	-4	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3171	25.00	23.61	ug/L	-6	20	0.0500	u
Ethylbenzene	1.8115	1.8345	25.00	25.32	ug/L	1	20	0.0500	u
m,p-Xylenes	0.6304	0.6576	50.00	52.16	ug/L	4	20	0.0500	u
o-Xylene	0.6283	0.6283	25.00	25.00	ug/L	0	20	0.0500	u
Styrene	1.0367	1.0779	25.00	25.99	ug/L	4	20	0.0500	u
Bromoform	0.1849	0.1943	25.00	22.77	ug/L	-9	20	0.1000	u
Isopropylbenzene	3.8595	3.4145	25.00	22.12	ug/L	-12	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9336	25.00	24.35	ug/L	-3	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0448	25.00	25.52	ug/L	2	20	0.0500	u
Propylbenzene	3.9448	4.0245	25.00	25.51	ug/L	2	20	0.0500	u
Bromobenzene	1.0220	0.9372	25.00	22.92	ug/L	-8	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.8175	25.00	25.68	ug/L	3	20	0.0500	u
2-Chlorotoluene	3.1099	3.1722	25.00	25.50	ug/L	2	20	0.0500	u
4-Chlorotoluene	2.6572	2.6576	25.00	25.00	ug/L	0	20	0.0500	u
tert-Butylbenzene	2.1712	2.0869	25.00	24.03	ug/L	-4	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7043	25.00	25.62	ug/L	2	20	0.0500	u
sec-Butylbenzene	3.1284	3.0359	25.00	24.26	ug/L	-3	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.3576	25.00	23.63	ug/L	-5	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6093	25.00	23.80	ug/L	-5	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5604	25.00	23.58	ug/L	-6	20	0.0500	u
n-Butylbenzene	2.4331	2.4818	25.00	31.05	ug/L	**24**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.5698	25.00	24.35	ug/L	-3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1715	25.00	24.38	ug/L	-2	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	0.9573	25.00	22.00	ug/L	-12	20	0.0500	u
Hexachlorobutadiene	0.4373	0.4118	25.00	23.54	ug/L	-6	20	0.0500	u
Naphthalene	2.7279	2.6023	25.00	23.85	ug/L	-5	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9409	25.00	23.34	ug/L	-7	20	0.0500	u
Dibromofluoromethane	0.4472	0.4595	50.00	51.37	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3788	50.00	50.69	ug/L	1	20	0.0500	u
Toluene-d8	1.4811	1.5530	50.00	52.43	ug/L	5	20	0.0500	u
Bromofluorobenzene	1.2424	1.2158	50.00	48.93	ug/L	-2	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1271686	-15.52	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	2146436	-12.28	11.74	11.74	0.00
Chlorobenzene-d5	2136176	1874475	-12.25	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	788590	-19.82	17.10	17.10	0.00

Analyst: BO Date: 09/22/09 Reviewer: LLH Date: 09/22/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214803 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC512854 IDF : 1.0
Seqnum : 839380641005.1 File : kil05 Time : 21-SEP-2009 09:30
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5499	25.00	25.68	ug/L	3	20	0.0500	u
Chloromethane	0.5160	0.4265	25.00	20.66	ug/L	-17	20	0.1000	u
Vinyl Chloride	0.5175	0.4589	25.00	22.17	ug/L	-11	20	0.0500	u
Bromomethane	0.2608	0.3103	25.00	29.74	ug/L	19	20	0.0500	u
Chloroethane	0.4094	0.4332	25.00	26.45	ug/L	6	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6910	25.00	23.30	ug/L	-7	20	0.0500	u
Iodomethane	0.2599	0.3377	25.00	31.55	ug/L	**26**	20	0.0500	c+ u ***
Acetone	0.1382	0.1236	25.00	22.36	ug/L	-11	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3844	25.00	25.64	ug/L	3	20	0.0500	u
Methylene Chloride	0.5280	0.5269	25.00	24.95	ug/L	0	20	0.0500	u
Carbon Disulfide	1.4090	1.3143	25.00	23.32	ug/L	-7	20	0.0500	u
MTBE	1.5447	1.4601	25.00	23.63	ug/L	-5	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5035	25.00	27.58	ug/L	10	20	0.0500	u
Vinyl Acetate	0.9726	0.8735	25.00	22.45	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9802	25.00	26.06	ug/L	4	20	0.1000	u
2-Butanone	0.2331	0.2122	25.00	22.75	ug/L	-9	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5613	25.00	25.79	ug/L	3	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7517	25.00	26.34	ug/L	5	20	0.0500	u
Chloroform	0.9238	0.8935	25.00	24.18	ug/L	-3	20	0.0500	u
Bromochloromethane	0.2354	0.2456	25.00	26.08	ug/L	4	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7181	25.00	25.53	ug/L	2	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4323	25.00	25.63	ug/L	3	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3370	25.00	24.19	ug/L	-3	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3985	25.00	22.68	ug/L	-9	20	0.0500	u
Benzene	1.3404	1.3952	25.00	26.02	ug/L	4	20	0.0500	u
Trichloroethene	0.3158	0.3231	25.00	25.58	ug/L	2	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3621	25.00	25.18	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3863	0.3893	25.00	25.19	ug/L	1	20	0.0500	u
Dibromomethane	0.1802	0.1756	25.00	24.36	ug/L	-3	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2573	25.00	21.13	ug/L	-15	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5618	25.00	27.18	ug/L	9	20	0.0500	u
Toluene	0.9593	0.9864	25.00	25.71	ug/L	3	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5439	25.00	23.73	ug/L	-5	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1815	25.00	25.94	ug/L	4	20	0.0500	u
2-Hexanone	0.2445	0.2046	25.00	20.92	ug/L	-16	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6341	25.00	25.85	ug/L	3	20	0.0500	u
Tetrachloroethene	0.3329	0.3310	25.00	24.86	ug/L	-1	20	0.0500	u
Dibromochloromethane	0.3027	0.3095	25.00	25.56	ug/L	2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3097	25.00	25.39	ug/L	2	20	0.0500	u
Chlorobenzene	1.0519	1.0714	25.00	25.46	ug/L	2	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3375	25.00	25.13	ug/L	1	20	0.0500	u
Ethylbenzene	1.8115	1.9105	25.00	26.37	ug/L	5	20	0.0500	u
m,p-Xylenes	0.6304	0.6930	50.00	54.96	ug/L	10	20	0.0500	u
o-Xylene	0.6283	0.6660	25.00	26.50	ug/L	6	20	0.0500	u
Styrene	1.0367	1.1342	25.00	27.35	ug/L	9	20	0.0500	u
Bromoform	0.1849	0.2011	25.00	23.51	ug/L	-6	20	0.1000	u
Isopropylbenzene	3.8595	3.7005	25.00	23.97	ug/L	-4	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9581	25.00	24.98	ug/L	0	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0502	25.00	25.65	ug/L	3	20	0.0500	u
Propylbenzene	3.9448	4.2843	25.00	27.15	ug/L	9	20	0.0500	u
Bromobenzene	1.0220	1.0260	25.00	25.10	ug/L	0	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.8981	25.00	26.42	ug/L	6	20	0.0500	u
2-Chlorotoluene	3.1099	3.3854	25.00	27.21	ug/L	9	20	0.0500	u
4-Chlorotoluene	2.6572	2.8510	25.00	26.82	ug/L	7	20	0.0500	u
tert-Butylbenzene	2.1712	2.2105	25.00	25.45	ug/L	2	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7198	25.00	25.77	ug/L	3	20	0.0500	u
sec-Butylbenzene	3.1284	3.1326	25.00	25.03	ug/L	0	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.3323	25.00	23.38	ug/L	-6	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.7428	25.00	25.78	ug/L	3	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6798	25.00	25.39	ug/L	2	20	0.0500	u
n-Butylbenzene	2.4331	2.3697	25.00	29.17	ug/L	17	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.6720	25.00	25.93	ug/L	4	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1724	25.00	24.50	ug/L	-2	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	0.9814	25.00	22.56	ug/L	-10	20	0.0500	u
Hexachlorobutadiene	0.4373	0.4039	25.00	23.09	ug/L	-8	20	0.0500	u
Naphthalene	2.7279	2.6992	25.00	24.74	ug/L	-1	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9498	25.00	23.56	ug/L	-6	20	0.0500	u
Dibromofluoromethane	0.4472	0.4506	50.00	50.38	ug/L	1	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3415	50.00	45.69	ug/L	-9	20	0.0500	u
Toluene-d8	1.4811	1.5369	50.00	51.88	ug/L	4	20	0.0500	u
Bromofluorobenzene	1.2424	1.2286	50.00	49.44	ug/L	-1	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1699378	12.89	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	2904596	18.70	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2516627	17.81	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1021365	3.85	17.10	17.10	0.00

Analyst: BO Date: 09/22/09 Reviewer: LLH Date: 09/22/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839378097

Date : 09/19/09 Reference : kif12
Sequence : MSVOA11 kij Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
003	CCV/BS	QC512765	1271686	10.81	2146436	11.74	1874475	14.82	788590	17.10
004	BSD	QC512766	1406833	10.81	2367793	11.74	2032455	14.82	835200	17.10
006	BLANK	QC512764	1331208	10.81	2268684	11.74	1916293	14.82	596028	17.10
007	SAMPLE	214803-001	1328332	10.81	2276854	11.74	1916101	14.82	599291	17.10
008	SAMPLE	214804-001	1316453	10.81	2257131	11.74	1898291	14.82	577005	17.10
009	SAMPLE	214804-002	1306936	10.81	2245693	11.74	1872873	14.82	574403	17.10
010	SAMPLE	214804-003	1262794	10.81	2179155	11.74	1836744	14.82	531759	17.10
011	SAMPLE	214804-004	1287859	10.81	2201261	11.74	1852420	14.82	584014	17.10
012	SAMPLE	214804-005	1262478	10.81	2183233	11.74	1835822	14.82	553973	17.10
013	SAMPLE	214804-006	1263672	10.81	2158913	11.74	1837222	14.82	592383	17.10
014	SAMPLE	214804-007	1260144	10.81	2166534	11.74	1834101	14.82	559383	17.10
015	SAMPLE	214803-002	1261858	10.81	2191629	11.74	1834422	14.82	568401	17.10
016	SAMPLE	214803-003	1240734	10.81	2156351	11.74	1805429	14.82	545930	17.10
017	MSS	214803-005	1235911	10.81	2147244	11.74	1804920	14.82	544191	17.10
018	SAMPLE	214803-006	1246310	10.81	2134045	11.74	1798075	14.82	570600	17.10
019	SAMPLE	214803-007	1243945	10.81	2153265	11.74	1799220	14.82	529329	17.10
020	SAMPLE	214803-008	1222831	10.81	2119458	11.74	1787141	14.82	547573	17.10
021	SAMPLE	214803-009	1218488	10.81	2110558	11.74	1778495	14.82	537719	17.10
022	SAMPLE	214803-010	1226055	10.81	2122185	11.74	1781942	14.82	551008	17.10
023	SAMPLE	214803-004	1216516	10.81	2100274	11.74	1769414	14.82	518065	17.10
024	MS	QC512786	1263374	10.81	2173784	11.74	1884390	14.82	793158	17.10
025	MSD	QC512787	1359357	10.81	2297826	11.74	1990978	14.82	823138	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839380641

Date : 09/21/09 Reference : kif12
Sequence : MSVOA11 kil Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
005	CCV/BS	QC512854	1699378	10.81	2904596	11.74	2516627	14.82	1021365	17.10
006	BSD	QC512855	1851769	10.81	3179021	11.74	2756220	14.82	1107271	17.10
008	BLANK	QC512856	1734993	10.81	3024239	11.74	2537530	14.82	716553	17.10
009	SAMPLE	214846-012	1693624	10.81	2940310	11.74	2484300	14.82	750510	17.10
010	SAMPLE	214846-003	1614668	10.81	2801777	11.74	2376106	14.82	719961	17.10
011	SAMPLE	214846-004	1582036	10.81	2764461	11.74	2347763	14.82	714709	17.10
012	SAMPLE	214846-005	1566988	10.81	2735175	11.74	2341097	14.82	696324	17.10
013	SAMPLE	214846-006	1551771	10.81	2719756	11.74	2311026	14.82	626743	17.10
014	SAMPLE	214846-007	1541501	10.81	2696916	11.74	2275943	14.82	678236	17.10
015	SAMPLE	214846-008	1512642	10.81	2654800	11.74	2292456	14.82	913392	17.10
016	SAMPLE	214846-009	2062833	10.81	3529073	11.74	3052702	14.82	1009551	17.10
017	SAMPLE	214846-010	2400145	10.81	4061618	11.74	3367586	14.82	1496353	17.10
018	SAMPLE	214846-011	2572353	10.81	4259810	11.74	3512080	14.82	1167404	17.10
019	SAMPLE	214846-013	2651454	10.81	4413282	11.74	3627126	14.82	1124362	17.10
020	SAMPLE	214846-014	2543494	10.81	4265585	11.74	3482026	14.82	1006625	17.10
021	SAMPLE	214846-015	2358746	10.81	3970815	11.74	3251617	14.82	922274	17.10
022	SAMPLE	214846-016	2157390	10.81	3664503	11.74	3007820	14.82	851439	17.10
023	SAMPLE	214846-017	2039639	10.81	3503747	11.74	2889577	14.82	857588	17.10
024	SAMPLE	214846-018	1957431	10.81	3350956	11.74	2775323	14.82	790062	17.10
025	SAMPLE	214846-019	1843605	10.81	3182366	11.74	2647469	14.82	774631	17.10
026	SAMPLE	214846-020	1786988	10.81	3094714	11.74	2564949	14.82	768779	17.10
027	SAMPLE	214846-021	1740997	10.81	3035685	11.74	2515969	14.82	726373	17.10
028	SAMPLE	214803-004	1697850	10.81	2981513	11.74	2471057	14.82	689989	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839378097

Instrument : MSVOA11 Begun : 09/19/09 13:37
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kij01	X	IB			09/19/09 13:37	1.0	1
002	kij02	TUN	BFB			09/19/09 14:43	1.0	2
003	kij03	CCV/BS	QC512765	Water	155093	09/19/09 15:06	1.0	3 4 5 6 1
004	kij04	BSD	QC512766	Water	155093	09/19/09 15:34	1.0	3 4 5 6 1
005	kij05	X	IB			09/19/09 16:03	1.0	1
006	kij06	BLANK	QC512764	Water	155093	09/19/09 16:31	1.0	1
007	kij07	SAMPLE	214803-001	Water	155093	09/19/09 16:59	1.0	1
008	kij08	SAMPLE	214804-001	Water	155093	09/19/09 17:28	1.0	1
009	kij09	SAMPLE	214804-002	Water	155093	09/19/09 17:56	1.0	1
010	kij10	SAMPLE	214804-003	Water	155093	09/19/09 18:24	1.0	1
011	kij11	SAMPLE	214804-004	Water	155093	09/19/09 18:52	1.0	1
012	kij12	SAMPLE	214804-005	Water	155093	09/19/09 19:21	1.0	1
013	kij13	SAMPLE	214804-006	Water	155093	09/19/09 19:49	1.0	1
014	kij14	SAMPLE	214804-007	Water	155093	09/19/09 20:17	1.0	1
015	kij15	SAMPLE	214803-002	Water	155093	09/19/09 20:46	1.0	1
016	kij16	SAMPLE	214803-003	Water	155093	09/19/09 21:14	1.0	1
017	kij17	MSS	214803-005	Water	155093	09/19/09 21:42	1.0	1
018	kij18	SAMPLE	214803-006	Water	155093	09/19/09 22:10	1.0	1
019	kij19	SAMPLE	214803-007	Water	155093	09/19/09 22:39	1.0	1
020	kij20	SAMPLE	214803-008	Water	155093	09/19/09 23:07	1.0	1
021	kij21	SAMPLE	214803-009	Water	155093	09/19/09 23:35	1.0	1
022	kij22	SAMPLE	214803-010	Water	155093	09/20/09 00:04	1.0	1
023	kij23	SAMPLE	214803-004	Water	155093	09/20/09 00:32	2.500	1
024	kij24	MS	QC512786	Water	155093	09/20/09 01:00	1.0	4 5 6 1 3
025	kij25	MSD	QC512787	Water	155093	09/20/09 01:28	1.0	4 5 6 1 3
026	kij26	X	IB			09/20/09 01:57	1.0	1

BO 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 26.

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/21/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839380641

Instrument : MSVOA11 Begun : 09/21/09 08:01
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kil01	X	IB			09/21/09 08:01	1.0	1	
002	kil02	X	BFB			09/21/09 08:28	1.0	2	
003	kil03	TUN	BFB			09/21/09 08:39	1.0	2	
004	kil04	X	20PPB			09/21/09 08:52	1.0	3 4 5 6 1	
005	kil05	CCV/BS	QC512854	Water	155111	09/21/09 09:30	1.0	7 8 9 10 1	
006	kil06	BSD	QC512855	Water	155111	09/21/09 09:58	1.0	7 8 9 10 1	
007	kil07	X	IB			09/21/09 10:27	1.0	1	
008	kil08	BLANK	QC512856	Water	155111	09/21/09 10:55	1.0	1	
009	kil09	SAMPLE	214846-012	Water	155111	09/21/09 11:23	1.0	1	
010	kil10	SAMPLE	214846-003	Water	155111	09/21/09 11:52	1.0	1	
011	kil11	SAMPLE	214846-004	Water	155111	09/21/09 12:20	1.0	1	
012	kil12	SAMPLE	214846-005	Water	155111	09/21/09 12:48	1.0	1	
013	kil13	SAMPLE	214846-006	Water	155111	09/21/09 13:17	1.0	1	
014	kil14	SAMPLE	214846-007	Water	155111	09/21/09 13:45	1.0	1	
015	kil15	SAMPLE	214846-008	Water	155111	09/21/09 14:13	1.0	1	
016	kil16	SAMPLE	214846-009	Water	155111	09/21/09 14:41	1.0	1	
017	kil17	SAMPLE	214846-010	Water	155111	09/21/09 15:10	1.0	1	
018	kil18	SAMPLE	214846-011	Water	155111	09/21/09 15:38	1.0	1	
019	kil19	SAMPLE	214846-013	Water	155111	09/21/09 16:06	1.0	1	
020	kil20	SAMPLE	214846-014	Water	155111	09/21/09 16:35	1.0	1	
021	kil21	SAMPLE	214846-015	Water	155111	09/21/09 17:03	1.0	1	
022	kil22	SAMPLE	214846-016	Water	155111	09/21/09 17:31	1.0	1	
023	kil23	SAMPLE	214846-017	Water	155111	09/21/09 17:59	1.0	1	
024	kil24	SAMPLE	214846-018	Water	155111	09/21/09 18:28	1.0	1	
025	kil25	SAMPLE	214846-019	Water	155111	09/21/09 18:56	1.0	1	
026	kil26	SAMPLE	214846-020	Water	155111	09/21/09 19:24	1.0	1	
027	kil27	SAMPLE	214846-021	Water	155111	09/21/09 19:52	1.0	1	
028	kil28	SAMPLE	214803-004	Water	155111	09/21/09 20:21	1.0	1	
029	kil29	X	IB			09/21/09 20:49	1.0	1	
030	kil30	X	IB			09/21/09 21:17	1.0	1	
031	kil31	X	IB			09/21/09 21:45	1.0	1	
032	kil32	X	IB			09/21/09 22:14	1.0	1	
033	kil33	X	IB			09/21/09 22:42	1.0	1	
034	kil34	X	IB			09/21/09 23:10	1.0	1	

BO 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 34.

BO 09/22/09 : Matrix spikes were not performed for this analysis in batch 155111 due to insufficient sample amount.

Analyst: BO Date: 09/22/09 Reviewer: LW Date: 09/22/09

Standards used: 1=S12947 2=S12404 3=S12733 4=S12773 5=S12217 6=S12634 7=S12589 8=S12845 9=S12693 10=S12923

GC/MS VOLATILE ORGANICS

Batch #: 155093

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214803-001	A	<2				11	1x	SD 9/19/09
2	-002								
3	-003								
4	-004		<2					2.5x	
5	-005		<2					1x	
6	-006								
7	-007								
8	-008								
9	-009								
10	-010								
11	214804-001								
12	-002								
13	-003								
14	-004								
15	-005								
16	-006								
17	-007								
18	214803-005	DCD	<2					ms/msD 1x	
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155111

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214803-4	C	<2	LV			11	[illegible] 1x, 00 [illegible] 75	
2	214846-3	A						1x	
3	-4								
4	-5								
5	-6								
6	-7								
7	-8								
8	-9								
9	-10								
10	-11	B							
11	-12	A		LV				TB	
12	-13							1x	
13	-14	B							
14	-15	A							
15	-16								
16	-17								
17	-18	B							
18	-19	A							
19	-20								
20	-21								
21									
22									
23									
24									
25									
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32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214804
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-090809B	214804-001
PL-501-9C1B	214804-002
ASE-36A-9C1	214804-003
BC-10B-9C1	214804-004
BC-10A-9C1	214804-005
BC-10C-9C1	214804-006
PL-503-9C1	214804-007
ASE-88B-9C1	214804-008
ASE-75B-9C1	214804-009
ASE-75C-9C1	214804-010
ASE-75A-9C1	214804-011

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214804**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/10/09**
Samples Received:	**09/10/09**

This data package contains sample and QC results for eleven water samples, requested for the above referenced project on 09/10/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics by GC/MS (EPA 8260B):

High response was observed for Freon 12 in the ICV analyzed 09/16/09 12:51; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for vinyl acetate in the ICV analyzed 09/15/09 22:56; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High response was observed for n-butylbenzene in the CCV analyzed 09/19/09 15:06; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for many analytes in the CCV analyzed 09/18/09 13:31; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for 2-hexanone in the CCV analyzed 09/22/09 11:24; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for bromomethane; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for n-butylbenzene, carbon tetrachloride, and iodomethane in the BS/BSD for batch 155052; these analytes were not detected at or above the RL in the associated samples. High RPD was observed for n-butylbenzene and naphthalene; these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene in the BS/BSD for batch 155093; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High recovery was observed for n-butylbenzene in the MS of ASE-113A-9C1 (lab # 214803-005); the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214804**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/10/09**
Samples Received:	**09/10/09**

Volatile Organics by GC/MS (EPA 8260B):

High recoveries were observed for n-butylbenzene in the MS/MSD of ASE-21C-9C1 (lab # 214805-007); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High surrogate recoveries were observed for bromofluorobenzene in a number of samples.

Naphthalene was detected above the RL in the method blank for batch 155052; this analyte was not detected in samples at or above the RL.

No other analytical problems were encountered.

Metals (EPA 6020) Water:

No analytical problems were encountered.

Metals (EPA 6020) Filtrate:

No analytical problems were encountered.

Chain of Custody

214804

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		

Privileged & Confidential

Site Name: Sky Harbor
Location of Site: Phoenix, AZ
Phase:
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: ~~M. Weise~~ - D. Foehr · M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14 Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Order

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab (Units)	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
1	TB	--	--	TB-090809B	9/8/9	0255				1		N	X														
2	ERB	--	--	PL-501-9C1	9/8/9	0308				3	G	N	X														
3	ASE-36A	--	97	ASE-36A-9C1	9/8/9	0418				3	G	N	X														
4	BC-10B	--	163	BC-10B-9C1	9/8/9	0517				3	G	N	X														
5	BC-10A	--	98	BC-10A-9C1	9/8/9	0541				5	G	N	X									X	X				
6	BC-10C	--	208	BC-10C-9C1	9/8/9	0751				3	G	N	X														
7	PL-503	--	--	PL-503-9C1	9/8/9	0801				3	G	N	X														
8	ASE-88A	--	208	ASE-88A-9C1	9/8/9	0940				3	G	N	X														
9	ASE-75B	--	200	ASE-75B-9C1	9/8/9	1050				3	G	N	X														
10	ASE-75C	--	208	ASE-75C-9C1	9/8/9	1142				3	G	N	X														
11	ASE-75A	--	113	ASE-75A-9C1	9/8/9	1211				3	G	N	X														
12										33																	

Relinquished by	Company: H+A	Received by	Company: FEDEX	Condition		Custody Seals Intact	
	Date/Time: 09/09/09 11:00		Date/Time: 09/09/09 11:00	Cooler Temp.			
Relinquished by	Company:	Received by	Company:	Condition		Custody Seals Intact	
	Date/Time:		Date/Time: 9/10/09 1030	Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 714804 Date Received 9-10-9 Number of coolers 1
Client Honeywell Project Quarterly UST

Date Opened 9-10-9 By (print) S Eyrus (sign) [signature]
Date Logged in 9-11-9 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
   Shipping info 863056395030

2A. Were custody seals present? ..(☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name [illegible] Date 9-9-9
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.9

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

This portion can be removed for recipient's records.
Date 9/09/09 FedEx Tracking Number 863056395030
Sender's Name MIKE WEISS
Company HARDING & ASSOCIATES, INC Phone 480 345-0988
Address 1840 S STAPLEY DR
City MESA State AZ ZIP 85204-6654
Your Internal Billing Reference

Subject: FW: 371016.SH.60.61.QS - C&T Login Summary (214804)
From: <Theresa.Wong@CH2M.com>
Date: Thu, 17 Sep 2009 14:13:29 -0600
To: <goyette@ctberk.com>
CC: <jpeter15@ch2m.com>, <Melanie.West@CH2M.com>, <Bernice.Kidd@CH2M.com>

Hi John,

Please see the attached 2nd copy of an amended COC for 214804 and use this one instead of the one I sent earlier today. One Field Sample ID had to be revised due to a duplicate in our database.

PL-501-9C1 should be PL-501-9C1B.

Thanks,
Theresa

From: John Goyette [mailto:goyette@ctberk.com]
Sent: Sunday, September 13, 2009 12:17 PM
To: Kidd, Bernice/RDD; Peterson, Jennifer/PHX; West, Melanie/PHX
Subject: 371016.SH.60.61.QS - C&T Login Summary (214804)

C&T Login Summary for 214804

Project: 371016.SH.60.61.QS **Site:** Quarterly UST **Lab Login #:** 214804 **Report Due:** 09/24/09 **PO#:** 5101516 **C&T Proj Mgr:** Anne Kathain	**Report To:** CH2M Hill 2625 South Plaza Drive Suite 300 Tempe, AZ 85282-3397 ATTN: Jennifer Peterson (480) 966-8188	**Bill To:** Honeywell 101 Columbia Road SOLVAY-4 Morristown, NJ 07962 ATTN: Troy Kennedy

VOC = 8260 or E8260; SVOC in water = 8270-2; TCLP or WET SVOC = 8270-2; PAH/PNA = 8270SIM; Control MB to RL; OK to run on more than 1 instrument; Metals soil: Se to run by 6020; ALWAYS PRINT FORMS TWICE in order for all flagging to be correct.; check COC for 8015 = TEHM or SW8015AZR1 = 8015AZ; DO NOT LOG 7 day TAT as RUSH- LOG in as STANDARD 8 10; TEH Analysis Hold=14days! ICP: P$/SD

Client ID	Lab ID	Sampled	Received	Matrix	Analyses	COC #	Comments
TB-090809B	001	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
PL-501-9C1	002	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
ASE-36A-9C1	003	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
BC-10B-9C1	004	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
BC-10A-9C1	005	09/08	09/10				
				Filtrate	CR		ICS-A and ICS-AB need to run at beginning and end of sequence; Selenium in soil to run by 6020 for RL requirement; Field Filtered
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
				Water	CR		ICS-A and ICS-AB need to run at beginning and end of sequence; Selenium in soil to run by 6020 for RL requirement; Field Filtered
				Water	ICP PREP		
BC-10C-9C1	006	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
PL-503-9C1	007	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
ASE-88A-9C1	008	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
ASE-75B-9C1	009	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
ASE-75C-9C1	010	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.
ASE-75A-9C1	011	09/08	09/10				
				Water	8260		Iodomethane required to pass; ICV to 25%, CCV to 20%; NO single point ICALs for surrogates.

Email compiled and sent 09/13/09 12:16 PM.

214804_Amended_COC.pdf	**Content-Description:**	214804_Amended_COC.pdf
	Content-Type:	application/pdf
	Content-Encoding:	base64

Amended 9/17/09 (TW) 214804

37380_090908

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2231

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 40000.70532
COC#
Lab Proj # (SDG):
Lab ID
Site ID
Lab Job #
Authorized User: Honeywell

Priv/Legal & Confidential
Site Name: Sky Harbor
Phase: Annual
Sampling Program: Quarterly UST
Location of Site: Phoenix, AZ

Sampling Co.: M+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: M. Weise - D. Foehr - M. HALL
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Preservation

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW80158)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)	MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units															
1	TB	--	--	TB-090809B	9/8/9	0255				1		N	X													
2	ERB	--	--	PL-501-9C1B (TW)	9/8/9	0308				3	G	N	X													
3	ASE-36A	--	97	ASE-36A-9C1	9/8/9	0418				3	G	N	X													
4	BC-10B	--	163	BC-10B-9C1	9/8/9	0517				3	G	N	X													
5	BC-10A	--	98	BC-10A-9C1	9/8/9	0541				3	G	N	X									X	X			
6	BC-10C	--	208	BC-10C-9C1	9/8/9	0751				3	G	N	X													
7	PL-503	--	--	PL-503-9C1	9/8/9	0801				3	G	N	X													
8	ASE-88A (B) (TW)	--	208	ASE-88A (B) (TW) 9C1	9/8/9	0940				3	G	N	X	Per M. Weise location is ASE-88B												
9	ASE-75B	--	200	ASE-75B-9C1	9/8/9	1050				3	G	N	X													
10	ASE-75C	--	208	ASE-75C-9C1	9/8/9	1142				3	G	N	X													
11	ASE-75A	--	113	ASE-75A-9C1	9/8/9	1211				3	G	N	X													
12										33																

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	HLA		FEDEX		
	Date/Time 09/09/09 11:00		Date/Time 09/09/09 11:00	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time 9/10/09 1050	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

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Laboratory Job Number 214804

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090809B	Batch#:	155093
Lab ID:	214804-001	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090809B	Batch#:	155093
Lab ID:	214804-001	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-501-9C1B	Batch#:	155093
Lab ID:	214804-002	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.0	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	0.7	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.6	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-501-9C1B	Batch#:	155093
Lab ID:	214804-002	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	0.7	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-36A-9C1	Batch#:	155093
Lab ID:	214804-003	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-36A-9C1	Batch#:	155093
Lab ID:	214804-003	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	123 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-10B-9C1	Batch#:	155093
Lab ID:	214804-004	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	30	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	7.5	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	6.2	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	19	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-10B-9C1	Batch#:	155093
Lab ID:	214804-004	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-10A-9C1	Batch#:	155093
Lab ID:	214804-005	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-10A-9C1	Batch#:	155093
Lab ID:	214804-005	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-10C-9C1	Batch#:	155093
Lab ID:	214804-006	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-10C-9C1	Batch#:	155093
Lab ID:	214804-006	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-503-9C1	Batch#:	155093
Lab ID:	214804-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-503-9C1	Batch#:	155093
Lab ID:	214804-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-88B-9C1	Batch#:	155052
Lab ID:	214804-008	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-88B-9C1	Batch#:	155052
Lab ID:	214804-008	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 R2 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	R7
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	126	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-75B-9C1	Batch#:	155153
Lab ID:	214804-009	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	5.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	21	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-75B-9C1	Batch#:	155153
Lab ID:	214804-009	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	123 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-75C-9C1	Batch#:	155052
Lab ID:	214804-010	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.8	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	6.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-75C-9C1	Batch#:	155052
Lab ID:	214804-010	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 R2 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	R7
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	114	77-120	
1,2-Dichloroethane-d4	125	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-75A-9C1	Batch#:	155153
Lab ID:	214804-011	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.8	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	0.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-75A-9C1	Batch#:	155153
Lab ID:	214804-011	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	122 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512616	Batch#:	155052
Matrix:	Water	Analyzed:	09/18/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512616	Batch#:	155052
Matrix:	Water	Analyzed:	09/18/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 R2 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	2.0 b	2.0	B1 R7
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	119	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	116	78-120	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155052
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512617

Analyte	Spiked	Result		%REC		Limits	ADEQ Flags
Freon 12	25.00	32.46	b	130		56-140	V3
Chloromethane	25.00	25.34		101		46-142	
Vinyl Chloride	25.00	26.19		105		49-136	
Bromomethane	25.00	29.35		117		42-154	
Chloroethane	25.00	25.20		101		51-133	
Trichlorofluoromethane	25.00	28.48		114		63-135	
Iodomethane	25.00	33.40	b	134	*	70-130	L1 V3
Acetone	25.00	25.77		103		48-130	
1,1-Dichloroethene	25.00	26.03		104		68-133	
Methylene Chloride	25.00	21.95		88		71-120	
Carbon Disulfide	25.00	24.52		98		56-120	
MTBE	25.00	26.64		107		58-120	
trans-1,2-Dichloroethene	25.00	26.86		107		80-120	
Vinyl Acetate	25.00	22.98	b	92		63-124	
1,1-Dichloroethane	25.00	26.61		106		77-120	
2-Butanone	25.00	24.84		99		57-120	
cis-1,2-Dichloroethene	25.00	24.24		97		75-120	
2,2-Dichloropropane	25.00	31.08	b	124		72-128	V3
Chloroform	25.00	25.24		101		78-120	
Bromochloromethane	25.00	25.39		102		78-120	
1,1,1-Trichloroethane	25.00	29.72		119		78-120	
1,1-Dichloropropene	25.00	29.14		117		75-120	
Carbon Tetrachloride	25.00	31.35	b	125	*	80-120	L1 V3
1,2-Dichloroethane	25.00	27.33		109		74-120	
Benzene	25.00	24.77		99		77-120	
Trichloroethene	25.00	26.12		104		78-122	
1,2-Dichloropropane	25.00	22.88		92		76-120	
Bromodichloromethane	25.00	26.02		104		78-120	
Dibromomethane	25.00	25.03		100		77-120	
4-Methyl-2-Pentanone	25.00	26.25		105		65-120	
cis-1,3-Dichloropropene	25.00	27.67		111		76-120	
Toluene	25.00	25.49		102		73-120	
trans-1,3-Dichloropropene	25.00	26.41		106		72-120	
1,1,2-Trichloroethane	25.00	26.12		104		76-120	
2-Hexanone	25.00	25.36		101		57-121	
1,3-Dichloropropane	25.00	25.26		101		75-120	
Tetrachloroethene	25.00	27.05		108		77-120	
Dibromochloromethane	25.00	26.69		107		76-120	
1,2-Dibromoethane	25.00	26.65		107		77-120	
Chlorobenzene	25.00	24.32		97		78-120	
1,1,1,2-Tetrachloroethane	25.00	26.68		107		77-120	
Ethylbenzene	25.00	27.87		111		78-120	
m,p-Xylenes	50.00	55.19		110		77-120	
o-Xylene	25.00	27.14		109		77-120	
Styrene	25.00	25.23		101		77-120	
Bromoform	25.00	27.98		112		74-121	
Isopropylbenzene	25.00	23.41		94		71-120	
1,1,2,2-Tetrachloroethane	25.00	23.32		93		73-120	
1,2,3-Trichloropropane	25.00	24.27		97		72-120	
Propylbenzene	25.00	25.99		104		76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155052
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	23.37	93	75-120	
1,3,5-Trimethylbenzene	25.00	25.48	102	77-120	
2-Chlorotoluene	25.00	24.48	98	76-120	
4-Chlorotoluene	25.00	25.31	101	78-120	
tert-Butylbenzene	25.00	26.92	108	76-120	
1,2,4-Trimethylbenzene	25.00	25.79	103	77-120	
sec-Butylbenzene	25.00	29.17	117	80-120	
para-Isopropyl Toluene	25.00	29.09	116	76-120	
1,3-Dichlorobenzene	25.00	24.31	97	75-120	
1,4-Dichlorobenzene	25.00	24.23	97	77-120	
n-Butylbenzene	25.00	31.96 b	128 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.35	101	76-120	
1,2-Dibromo-3-Chloropropane	25.00	26.33	105	65-120	
1,2,4-Trichlorobenzene	25.00	26.14	105	73-121	
Hexachlorobutadiene	25.00	30.47 b	122	73-123	V3
Naphthalene	25.00	25.31	101	62-121	
1,2,3-Trichlorobenzene	25.00	28.18	113	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	114	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	93	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155052
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512618

Analyte	Spiked	Result		%REC		Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	30.66	b	123		56-140	6	24	V3
Chloromethane	25.00	26.94		108		46-142	6	24	
Vinyl Chloride	25.00	25.93		104		49-136	1	24	
Bromomethane	25.00	26.89		108		42-154	9	24	
Chloroethane	25.00	24.69		99		51-133	2	25	
Trichlorofluoromethane	25.00	27.13		109		63-135	5	20	
Iodomethane	25.00	32.82	b	131	*	70-130	2	20	L1 V3
Acetone	25.00	25.50		102		48-130	1	41	
1,1-Dichloroethene	25.00	26.39		106		68-133	1	20	
Methylene Chloride	25.00	22.43		90		71-120	2	20	
Carbon Disulfide	25.00	22.56		90		56-120	8	20	
MTBE	25.00	25.91		104		58-120	3	21	
trans-1,2-Dichloroethene	25.00	24.98		100		80-120	7	24	
Vinyl Acetate	25.00	21.31	b	85		63-124	8	24	
1,1-Dichloroethane	25.00	24.53		98		77-120	8	20	
2-Butanone	25.00	26.19		105		57-120	5	32	
cis-1,2-Dichloroethene	25.00	23.95		96		75-120	1	20	
2,2-Dichloropropane	25.00	30.52	b	122		72-128	2	24	V3
Chloroform	25.00	24.65		99		78-120	2	20	
Bromochloromethane	25.00	25.06		100		78-120	1	20	
1,1,1-Trichloroethane	25.00	27.98		112		78-120	6	20	
1,1-Dichloropropene	25.00	27.86		111		75-120	5	21	
Carbon Tetrachloride	25.00	29.10	b	116		80-120	7	21	V3
1,2-Dichloroethane	25.00	26.12		104		74-120	5	20	
Benzene	25.00	24.11		96		77-120	3	20	
Trichloroethene	25.00	25.05		100		78-122	4	20	
1,2-Dichloropropane	25.00	22.08		88		76-120	4	20	
Bromodichloromethane	25.00	24.95		100		78-120	4	20	
Dibromomethane	25.00	23.84		95		77-120	5	20	
4-Methyl-2-Pentanone	25.00	25.63		103		65-120	2	22	
cis-1,3-Dichloropropene	25.00	25.76		103		76-120	7	20	
Toluene	25.00	24.79		99		73-120	3	20	
trans-1,3-Dichloropropene	25.00	25.17		101		72-120	5	20	
1,1,2-Trichloroethane	25.00	26.09		104		76-120	0	20	
2-Hexanone	25.00	25.98		104		57-121	2	25	
1,3-Dichloropropane	25.00	24.98		100		75-120	1	20	
Tetrachloroethene	25.00	26.11		104		77-120	4	20	
Dibromochloromethane	25.00	25.01		100		76-120	6	20	
1,2-Dibromoethane	25.00	24.92		100		77-120	7	20	
Chlorobenzene	25.00	24.10		96		78-120	1	20	
1,1,1,2-Tetrachloroethane	25.00	24.58		98		77-120	8	20	
Ethylbenzene	25.00	26.58		106		78-120	5	26	
m,p-Xylenes	50.00	51.22		102		77-120	7	20	
o-Xylene	25.00	25.91		104		77-120	5	20	
Styrene	25.00	24.85		99		77-120	2	20	
Bromoform	25.00	26.91		108		74-121	4	21	
Isopropylbenzene	25.00	22.46		90		71-120	4	20	
1,1,2,2-Tetrachloroethane	25.00	23.97		96		73-120	3	20	
1,2,3-Trichloropropane	25.00	26.58		106		72-120	9	20	
Propylbenzene	25.00	25.55		102		76-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155052
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	25.00	24.29	97	75-120	4	20	
1,3,5-Trimethylbenzene	25.00	25.46	102	77-120	0	20	
2-Chlorotoluene	25.00	25.24	101	76-120	3	20	
4-Chlorotoluene	25.00	25.16	101	78-120	1	20	
tert-Butylbenzene	25.00	26.12	104	76-120	3	21	
1,2,4-Trimethylbenzene	25.00	25.85	103	77-120	0	20	
sec-Butylbenzene	25.00	27.95	112	80-120	4	21	
para-Isopropyl Toluene	25.00	25.76	103	76-120	12	20	
1,3-Dichlorobenzene	25.00	24.64	99	75-120	1	20	
1,4-Dichlorobenzene	25.00	24.48	98	77-120	1	23	
n-Butylbenzene	25.00	24.45 b	98	76-120	27 *	21	R7 V3
1,2-Dichlorobenzene	25.00	25.81	103	76-120	2	20	
1,2-Dibromo-3-Chloropropane	25.00	25.50	102	65-120	3	22	
1,2,4-Trichlorobenzene	25.00	21.46	86	73-121	20	20	
Hexachlorobutadiene	25.00	26.93 b	108	73-123	12	25	V3
Naphthalene	25.00	16.79	67	62-121	40 *	32	R7
1,2,3-Trichlorobenzene	25.00	22.35	89	66-123	23	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	108	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512764	Batch#:	155093
Matrix:	Water	Analyzed:	09/19/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512764	Batch#:	155093
Matrix:	Water	Analyzed:	09/19/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512765

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	23.59	94	56-140	
Chloromethane	25.00	22.02	88	46-142	
Vinyl Chloride	25.00	22.44	90	49-136	
Bromomethane	25.00	24.61	98	42-154	
Chloroethane	25.00	24.49	98	51-133	
Trichlorofluoromethane	25.00	22.33	89	63-135	
Iodomethane	25.00	29.83	119	70-130	
Acetone	25.00	23.21	93	48-130	
1,1-Dichloroethene	25.00	25.59	102	68-133	
Methylene Chloride	25.00	24.57	98	71-120	
Carbon Disulfide	25.00	24.10	96	56-120	
MTBE	25.00	24.17	97	58-120	
trans-1,2-Dichloroethene	25.00	26.37	105	80-120	
Vinyl Acetate	25.00	24.32	97	63-124	
1,1-Dichloroethane	25.00	25.96	104	77-120	
2-Butanone	25.00	23.77	95	57-120	
cis-1,2-Dichloroethene	25.00	24.29	97	75-120	
2,2-Dichloropropane	25.00	26.59	106	72-128	
Chloroform	25.00	23.80	95	78-120	
Bromochloromethane	25.00	24.94	100	78-120	
1,1,1-Trichloroethane	25.00	25.90	104	78-120	
1,1-Dichloropropene	25.00	25.63	103	75-120	
Carbon Tetrachloride	25.00	25.06	100	80-120	
1,2-Dichloroethane	25.00	24.44	98	74-120	
Benzene	25.00	25.48	102	77-120	
Trichloroethene	25.00	24.68	99	78-122	
1,2-Dichloropropane	25.00	25.00	100	76-120	
Bromodichloromethane	25.00	25.12	100	78-120	
Dibromomethane	25.00	24.46	98	77-120	
4-Methyl-2-Pentanone	25.00	22.29	89	65-120	
cis-1,3-Dichloropropene	25.00	26.62	106	76-120	
Toluene	25.00	24.68	99	73-120	
trans-1,3-Dichloropropene	25.00	23.43	94	72-120	
1,1,2-Trichloroethane	25.00	25.59	102	76-120	
2-Hexanone	25.00	21.47	86	57-121	
1,3-Dichloropropane	25.00	25.68	103	75-120	
Tetrachloroethene	25.00	23.53	94	77-120	
Dibromochloromethane	25.00	24.52	98	76-120	
1,2-Dibromoethane	25.00	24.39	98	77-120	
Chlorobenzene	25.00	24.12	96	78-120	
1,1,1,2-Tetrachloroethane	25.00	23.61	94	77-120	
Ethylbenzene	25.00	25.32	101	78-120	
m,p-Xylenes	50.00	52.16	104	77-120	
o-Xylene	25.00	25.00	100	77-120	
Styrene	25.00	25.99	104	77-120	
Bromoform	25.00	22.77	91	74-121	
Isopropylbenzene	25.00	22.12	88	71-120	
1,1,2,2-Tetrachloroethane	25.00	24.35	97	73-120	
1,2,3-Trichloropropane	25.00	25.52	102	72-120	
Propylbenzene	25.00	25.51	102	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	22.92	92	75-120	
1,3,5-Trimethylbenzene	25.00	25.68	103	77-120	
2-Chlorotoluene	25.00	25.50	102	76-120	
4-Chlorotoluene	25.00	25.00	100	78-120	
tert-Butylbenzene	25.00	24.03	96	76-120	
1,2,4-Trimethylbenzene	25.00	25.62	102	77-120	
sec-Butylbenzene	25.00	24.26	97	80-120	
para-Isopropyl Toluene	25.00	23.63	95	76-120	
1,3-Dichlorobenzene	25.00	23.80	95	75-120	
1,4-Dichlorobenzene	25.00	23.58	94	77-120	
n-Butylbenzene	25.00	31.05 b	124 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	24.35	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.38	98	65-120	
1,2,4-Trichlorobenzene	25.00	22.00	88	73-121	
Hexachlorobutadiene	25.00	23.54	94	73-123	
Naphthalene	25.00	23.85	95	62-121	
1,2,3-Trichlorobenzene	25.00	23.34	93	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	24.76	99	56-140	5	24	
Chloromethane	25.00	22.24	89	46-142	1	24	
Vinyl Chloride	25.00	22.87	91	49-136	2	24	
Bromomethane	25.00	26.43	106	42-154	7	24	
Chloroethane	25.00	24.83	99	51-133	1	25	
Trichlorofluoromethane	25.00	22.50	90	63-135	1	20	
Iodomethane	25.00	32.18	129	70-130	8	20	
Acetone	25.00	22.31	89	48-130	4	41	
1,1-Dichloroethene	25.00	26.02	104	68-133	2	20	
Methylene Chloride	25.00	24.29	97	71-120	1	20	
Carbon Disulfide	25.00	24.46	98	56-120	2	20	
MTBE	25.00	24.31	97	58-120	1	21	
trans-1,2-Dichloroethene	25.00	26.76	107	80-120	1	24	
Vinyl Acetate	25.00	23.88	96	63-124	2	24	
1,1-Dichloroethane	25.00	25.93	104	77-120	0	20	
2-Butanone	25.00	23.10	92	57-120	3	32	
cis-1,2-Dichloroethene	25.00	24.71	99	75-120	2	20	
2,2-Dichloropropane	25.00	26.54	106	72-128	0	24	
Chloroform	25.00	23.69	95	78-120	0	20	
Bromochloromethane	25.00	24.53	98	78-120	2	20	
1,1,1-Trichloroethane	25.00	26.18	105	78-120	1	20	
1,1-Dichloropropene	25.00	26.20	105	75-120	2	21	
Carbon Tetrachloride	25.00	25.16	101	80-120	0	21	
1,2-Dichloroethane	25.00	23.92	96	74-120	2	20	
Benzene	25.00	25.65	103	77-120	1	20	
Trichloroethene	25.00	24.84	99	78-122	1	20	
1,2-Dichloropropane	25.00	24.78	99	76-120	1	20	
Bromodichloromethane	25.00	24.71	99	78-120	2	20	
Dibromomethane	25.00	24.06	96	77-120	2	20	
4-Methyl-2-Pentanone	25.00	22.68	91	65-120	2	22	
cis-1,3-Dichloropropene	25.00	26.35	105	76-120	1	20	
Toluene	25.00	25.11	100	73-120	2	20	
trans-1,3-Dichloropropene	25.00	23.63	95	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.71	103	76-120	0	20	
2-Hexanone	25.00	22.30	89	57-121	4	25	
1,3-Dichloropropane	25.00	25.66	103	75-120	0	20	
Tetrachloroethene	25.00	24.43	98	77-120	4	20	
Dibromochloromethane	25.00	24.70	99	76-120	1	20	
1,2-Dibromoethane	25.00	24.72	99	77-120	1	20	
Chlorobenzene	25.00	24.57	98	78-120	2	20	
1,1,1,2-Tetrachloroethane	25.00	24.24	97	77-120	3	20	
Ethylbenzene	25.00	25.87	103	78-120	2	26	
m,p-Xylenes	50.00	53.24	106	77-120	2	20	
o-Xylene	25.00	25.41	102	77-120	2	20	
Styrene	25.00	26.22	105	77-120	1	20	
Bromoform	25.00	23.07	92	74-121	1	21	
Isopropylbenzene	25.00	23.31	93	71-120	5	20	
1,1,2,2-Tetrachloroethane	25.00	25.11	100	73-120	3	20	
1,2,3-Trichloropropane	25.00	25.85	103	72-120	1	20	
Propylbenzene	25.00	26.63	107	76-120	4	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155093
Units:	ug/L	Analyzed:	09/19/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	25.00	23.78	95	75-120	4	20	
1,3,5-Trimethylbenzene	25.00	26.34	105	77-120	3	20	
2-Chlorotoluene	25.00	26.49	106	76-120	4	20	
4-Chlorotoluene	25.00	25.83	103	78-120	3	20	
tert-Butylbenzene	25.00	25.11	100	76-120	4	21	
1,2,4-Trimethylbenzene	25.00	26.23	105	77-120	2	20	
sec-Butylbenzene	25.00	24.95	100	80-120	3	21	
para-Isopropyl Toluene	25.00	23.63	95	76-120	0	20	
1,3-Dichlorobenzene	25.00	24.56	98	75-120	3	20	
1,4-Dichlorobenzene	25.00	24.29	97	77-120	3	23	
n-Butylbenzene	25.00	31.46 b	126 *	76-120	1	21	L1 V3
1,2-Dichlorobenzene	25.00	24.82	99	76-120	2	20	
1,2-Dibromo-3-Chloropropane	25.00	25.85	103	65-120	6	22	
1,2,4-Trichlorobenzene	25.00	22.84	91	73-121	4	20	
Hexachlorobutadiene	25.00	23.75	95	73-123	1	25	
Naphthalene	25.00	24.99	100	62-121	5	32	
1,2,3-Trichlorobenzene	25.00	24.03	96	66-123	3	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Type: MS Lab ID: QC512786

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	26.75	107	56-140	
Chloromethane	<0.2000	25.00	24.84	99	46-142	
Vinyl Chloride	<0.1000	25.00	25.13	101	49-136	
Bromomethane	<0.2000	25.00	30.31	121	42-154	
Chloroethane	<0.2000	25.00	26.67	107	51-133	
Trichlorofluoromethane	<0.2000	25.00	26.11	104	63-135	
Iodomethane	<2.000	25.00	31.12	124	60-140	
Acetone	<1.000	25.00	23.53	94	48-130	
1,1-Dichloroethene	<0.1000	25.00	25.21	101	68-133	
Methylene Chloride	0.1289	25.00	25.27	101	71-120	
Carbon Disulfide	<0.1000	25.00	23.31	93	56-120	
MTBE	<0.1000	25.00	24.27	97	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	27.21	109	80-120	
Vinyl Acetate	<2.000	25.00	22.15	89	63-124	
1,1-Dichloroethane	<0.1000	25.00	27.02	108	77-120	
2-Butanone	<2.000	25.00	24.44	98	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	25.62	102	75-120	
2,2-Dichloropropane	<0.1000	25.00	24.54	98	72-128	
Chloroform	0.1441	25.00	25.10	100	78-120	
Bromochloromethane	<0.1000	25.00	25.90	104	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	27.20	109	78-120	
1,1-Dichloropropene	<0.1000	25.00	25.77	103	75-120	
Carbon Tetrachloride	<0.1000	25.00	25.05	100	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.01	100	74-120	
Benzene	<0.1000	25.00	26.24	105	77-120	
Trichloroethene	<0.1000	25.00	25.70	103	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.57	102	76-120	
Bromodichloromethane	<0.1000	25.00	25.83	103	78-120	
Dibromomethane	<0.1000	25.00	24.66	99	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	22.75	91	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	26.62	106	76-120	
Toluene	<0.1000	25.00	25.43	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.57	94	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	26.09	104	76-120	
2-Hexanone	<2.000	25.00	22.17	89	57-121	
1,3-Dichloropropane	<0.1000	25.00	26.20	105	75-120	
Tetrachloroethene	0.1400	25.00	24.23	96	77-120	
Dibromochloromethane	<0.1000	25.00	25.15	101	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.90	100	77-120	
Chlorobenzene	<0.1000	25.00	24.85	99	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.74	99	77-120	
Ethylbenzene	<0.1000	25.00	26.45	106	78-120	
m,p-Xylenes	<0.1594	50.00	54.36	109	77-120	
o-Xylene	<0.1000	25.00	26.40	106	77-120	
Styrene	<0.1000	25.00	25.96	104	77-120	
Bromoform	<0.2000	25.00	23.08	92	74-121	
Isopropylbenzene	<0.1000	25.00	23.25	93	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	24.97	100	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.29	105	72-120	
Propylbenzene	<0.1000	25.00	27.03	108	76-120	
Bromobenzene	<0.1000	25.00	23.77	95	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.33	105	77-120	
2-Chlorotoluene	<0.1000	25.00	26.95	108	76-120	
4-Chlorotoluene	<0.1000	25.00	26.47	106	78-120	
tert-Butylbenzene	<0.1000	25.00	25.66	103	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.15	105	77-120	
sec-Butylbenzene	<0.1029	25.00	25.37	101	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.88	96	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.85	99	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.77	99	77-120	
n-Butylbenzene	<0.1285	25.00	30.17 b	121 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	25.10	100	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.93	100	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	22.05	88	73-121	
Hexachlorobutadiene	<0.4000	25.00	23.37	93	73-123	
Naphthalene	<0.4000	25.00	24.55	98	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	23.42	94	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC512787

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	26.42	106	56-140	1	24	
Chloromethane	25.00	23.40	94	46-142	6	24	
Vinyl Chloride	25.00	24.42	98	49-136	3	24	
Bromomethane	25.00	28.79	115	42-154	5	24	
Chloroethane	25.00	25.33	101	51-133	5	25	
Trichlorofluoromethane	25.00	23.73	95	63-135	10	20	
Iodomethane	25.00	30.68	123	60-140	1	30	
Acetone	25.00	23.80	95	48-130	1	41	
1,1-Dichloroethene	25.00	23.85	95	68-133	6	20	
Methylene Chloride	25.00	24.20	96	71-120	4	20	
Carbon Disulfide	25.00	21.82	87	56-120	7	20	
MTBE	25.00	23.52	94	58-120	3	21	
trans-1,2-Dichloroethene	25.00	25.60	102	80-120	6	24	
Vinyl Acetate	25.00	20.81	83	63-124	6	24	
1,1-Dichloroethane	25.00	25.15	101	77-120	7	20	
2-Butanone	25.00	23.30	93	57-120	5	32	
cis-1,2-Dichloroethene	25.00	24.37	97	75-120	5	20	
2,2-Dichloropropane	25.00	22.65	91	72-128	8	24	
Chloroform	25.00	23.40	93	78-120	7	20	
Bromochloromethane	25.00	24.72	99	78-120	5	20	
1,1,1-Trichloroethane	25.00	25.08	100	78-120	8	20	
1,1-Dichloropropene	25.00	24.41	98	75-120	5	21	
Carbon Tetrachloride	25.00	23.46	94	80-120	7	21	
1,2-Dichloroethane	25.00	23.71	95	74-120	5	20	
Benzene	25.00	24.88	100	77-120	5	20	
Trichloroethene	25.00	24.21	97	78-122	6	20	
1,2-Dichloropropane	25.00	24.51	98	76-120	4	20	
Bromodichloromethane	25.00	24.71	99	78-120	4	20	
Dibromomethane	25.00	23.97	96	77-120	3	20	
4-Methyl-2-Pentanone	25.00	22.64	91	65-120	1	22	
cis-1,3-Dichloropropene	25.00	25.63	103	76-120	4	20	
Toluene	25.00	24.41	98	73-120	4	20	
trans-1,3-Dichloropropene	25.00	22.86	91	72-120	3	20	
1,1,2-Trichloroethane	25.00	25.31	101	76-120	3	20	
2-Hexanone	25.00	22.44	90	57-121	1	25	
1,3-Dichloropropane	25.00	25.60	102	75-120	2	20	
Tetrachloroethene	25.00	22.79	91	77-120	6	20	
Dibromochloromethane	25.00	24.36	97	76-120	3	20	
1,2-Dibromoethane	25.00	24.64	99	77-120	1	20	
Chlorobenzene	25.00	23.97	96	78-120	4	20	
1,1,1,2-Tetrachloroethane	25.00	23.74	95	77-120	4	20	
Ethylbenzene	25.00	25.12	100	78-120	5	26	
m,p-Xylenes	50.00	51.87	104	77-120	5	20	
o-Xylene	25.00	25.16	101	77-120	5	20	
Styrene	25.00	25.03	100	77-120	4	20	
Bromoform	25.00	22.77	91	74-121	1	21	
Isopropylbenzene	25.00	22.26	89	71-120	4	20	
1,1,2,2-Tetrachloroethane	25.00	25.01	100	73-120	0	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-9C1	Batch#:	155093
MSS Lab ID:	214803-005	Sampled:	09/09/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/20/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	25.95	104	72-120	1	20	
Propylbenzene	25.00	25.27	101	76-120	7	20	
Bromobenzene	25.00	23.31	93	75-120	2	20	
1,3,5-Trimethylbenzene	25.00	25.01	100	77-120	5	20	
2-Chlorotoluene	25.00	25.68	103	76-120	5	20	
4-Chlorotoluene	25.00	25.21	101	78-120	5	20	
tert-Butylbenzene	25.00	23.68	95	76-120	8	21	
1,2,4-Trimethylbenzene	25.00	24.62	98	77-120	6	20	
sec-Butylbenzene	25.00	23.23	93	80-120	9	21	
para-Isopropyl Toluene	25.00	22.16	89	76-120	7	20	
1,3-Dichlorobenzene	25.00	23.87	95	75-120	4	20	
1,4-Dichlorobenzene	25.00	23.64	95	77-120	5	23	
n-Butylbenzene	25.00	27.04 b	108	76-120	11	21	V3
1,2-Dichlorobenzene	25.00	24.11	96	76-120	4	20	
1,2-Dibromo-3-Chloropropane	25.00	25.24	101	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	21.24	85	73-121	4	20	
Hexachlorobutadiene	25.00	21.86	87	73-123	7	25	
Naphthalene	25.00	24.32	97	62-121	1	32	
1,2,3-Trichlorobenzene	25.00	22.90	92	66-123	2	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	25.09	100	56-140	
Chloromethane	25.00	24.06	96	46-142	
Vinyl Chloride	25.00	25.18	101	49-136	
Bromomethane	25.00	30.49 b	122	42-154	V3
Chloroethane	25.00	25.43	102	51-133	
Trichlorofluoromethane	25.00	22.49	90	63-135	
Iodomethane	25.00	28.96	116	70-130	
Acetone	25.00	21.26	85	48-130	
1,1-Dichloroethene	25.00	24.39	98	68-133	
Methylene Chloride	25.00	25.20	101	71-120	
Carbon Disulfide	25.00	23.13	93	56-120	
MTBE	25.00	23.53	94	58-120	
trans-1,2-Dichloroethene	25.00	26.34	105	80-120	
Vinyl Acetate	25.00	22.50	90	63-124	
1,1-Dichloroethane	25.00	25.06	100	77-120	
2-Butanone	25.00	22.39	90	57-120	
cis-1,2-Dichloroethene	25.00	24.90	100	75-120	
2,2-Dichloropropane	25.00	24.54	98	72-128	
Chloroform	25.00	22.81	91	78-120	
Bromochloromethane	25.00	25.78	103	78-120	
1,1,1-Trichloroethane	25.00	23.56	94	78-120	
1,1-Dichloropropene	25.00	23.29	93	75-120	
Carbon Tetrachloride	25.00	21.51	86	80-120	
1,2-Dichloroethane	25.00	22.00	88	74-120	
Benzene	25.00	24.80	99	77-120	
Trichloroethene	25.00	23.39	94	78-122	
1,2-Dichloropropane	25.00	23.78	95	76-120	
Bromodichloromethane	25.00	23.44	94	78-120	
Dibromomethane	25.00	23.45	94	77-120	
4-Methyl-2-Pentanone	25.00	20.17	81	65-120	
cis-1,3-Dichloropropene	25.00	25.57	102	76-120	
Toluene	25.00	24.09	96	73-120	
trans-1,3-Dichloropropene	25.00	22.55	90	72-120	
1,1,2-Trichloroethane	25.00	24.65	99	76-120	
2-Hexanone	25.00	19.54 b	78	57-121	V9
1,3-Dichloropropane	25.00	24.55	98	75-120	
Tetrachloroethene	25.00	22.04	88	77-120	
Dibromochloromethane	25.00	23.68	95	76-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	24.06	96	77-120	
Chlorobenzene	25.00	23.61	94	78-120	
1,1,1,2-Tetrachloroethane	25.00	22.87	91	77-120	
Ethylbenzene	25.00	23.81	95	78-120	
m,p-Xylenes	50.00	49.03	98	77-120	
o-Xylene	25.00	23.71	95	77-120	
Styrene	25.00	24.73	99	77-120	
Bromoform	25.00	22.01	88	74-121	
Isopropylbenzene	25.00	21.70	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.17	101	73-120	
1,2,3-Trichloropropane	25.00	25.39	102	72-120	
Propylbenzene	25.00	23.58	94	76-120	
Bromobenzene	25.00	24.49	98	75-120	
1,3,5-Trimethylbenzene	25.00	25.43	102	77-120	
2-Chlorotoluene	25.00	25.33	101	76-120	
4-Chlorotoluene	25.00	24.51	98	78-120	
tert-Butylbenzene	25.00	21.43	86	76-120	
1,2,4-Trimethylbenzene	25.00	26.06	104	77-120	
sec-Butylbenzene	25.00	21.16	85	80-120	
para-Isopropyl Toluene	25.00	22.04	88	76-120	
1,3-Dichlorobenzene	25.00	23.90	96	75-120	
1,4-Dichlorobenzene	25.00	23.54	94	77-120	
n-Butylbenzene	25.00	29.02	116	76-120	
1,2-Dichlorobenzene	25.00	24.16	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.86	95	65-120	
1,2,4-Trichlorobenzene	25.00	23.44	94	73-121	
Hexachlorobutadiene	25.00	20.08	80	73-123	
Naphthalene	25.00	25.89	104	62-121	
1,2,3-Trichlorobenzene	25.00	24.60	98	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	102	78-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	121 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513027

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	27.44	110	56-140	
Chloromethane	<0.2000	25.00	27.59	110	46-142	
Vinyl Chloride	<0.1000	25.00	28.18	113	49-136	
Bromomethane	<0.2000	25.00	33.33 b	133	42-154	V3
Chloroethane	<0.2000	25.00	28.30	113	51-133	
Trichlorofluoromethane	<0.2000	25.00	24.84	99	63-135	
Iodomethane	<2.000	25.00	30.99	124	60-140	
Acetone	<1.000	25.00	22.92	92	48-130	
1,1-Dichloroethene	<0.1000	25.00	27.97	112	68-133	
Methylene Chloride	0.3266	25.00	27.21	108	71-120	
Carbon Disulfide	<0.1000	25.00	26.98	108	56-120	
MTBE	<0.1000	25.00	24.62	98	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	28.94	116	80-120	
Vinyl Acetate	<2.000	25.00	24.66	99	63-124	
1,1-Dichloroethane	<0.1000	25.00	28.24	113	77-120	
2-Butanone	<2.000	25.00	24.62	98	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	26.98	108	75-120	
2,2-Dichloropropane	<0.1000	25.00	28.33	113	72-128	
Chloroform	0.1148	25.00	25.52	102	78-120	
Bromochloromethane	<0.1000	25.00	27.36	109	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	27.42	110	78-120	
1,1-Dichloropropene	<0.1000	25.00	26.74	107	75-120	
Carbon Tetrachloride	<0.1000	25.00	24.70	99	80-120	
1,2-Dichloroethane	<0.1000	25.00	24.03	96	74-120	
Benzene	<0.1000	25.00	26.89	108	77-120	
Trichloroethene	<0.1000	25.00	25.64	103	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.58	102	76-120	
Bromodichloromethane	<0.1000	25.00	24.97	100	78-120	
Dibromomethane	<0.1000	25.00	24.50	98	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.13	85	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	26.66	107	76-120	
Toluene	0.2653	25.00	25.77	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.46	94	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.39	102	76-120	
2-Hexanone	<2.000	25.00	20.07 b	80	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.59	102	75-120	
Tetrachloroethene	<0.1316	25.00	24.31	97	77-120	
Dibromochloromethane	<0.1000	25.00	24.30	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.34	97	77-120	
Chlorobenzene	<0.1000	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.25	97	77-120	
Ethylbenzene	<0.1000	25.00	26.24	105	78-120	
m,p-Xylenes	<0.1594	50.00	53.82	108	77-120	
o-Xylene	<0.1000	25.00	25.77	103	77-120	
Styrene	<0.1000	25.00	26.58	106	77-120	
Bromoform	<0.2000	25.00	22.41	90	74-121	
Isopropylbenzene	<0.1000	25.00	23.65	95	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.09	100	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.03	104	72-120	
Propylbenzene	<0.1000	25.00	26.63	107	76-120	
Bromobenzene	<0.1000	25.00	24.37	97	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.61	106	77-120	
2-Chlorotoluene	<0.1000	25.00	27.05	108	76-120	
4-Chlorotoluene	<0.1000	25.00	26.34	105	78-120	
tert-Butylbenzene	<0.1000	25.00	24.61	98	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.76	107	77-120	
sec-Butylbenzene	<0.1029	25.00	24.42	98	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.42	94	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.18	101	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.68	99	77-120	
n-Butylbenzene	<0.1285	25.00	31.43	126 *	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.19	101	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.00	96	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	23.55	94	73-121	
Hexachlorobutadiene	<0.4000	25.00	22.13	89	73-123	
Naphthalene	<0.4000	25.00	25.49	102	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	24.19	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	27.26	109	56-140	1	24	
Chloromethane	25.00	27.66	111	46-142	0	24	
Vinyl Chloride	25.00	28.73	115	49-136	2	24	
Bromomethane	25.00	32.55 b	130	42-154	2	24	V3
Chloroethane	25.00	27.91	112	51-133	1	25	
Trichlorofluoromethane	25.00	23.79	95	63-135	4	20	
Iodomethane	25.00	32.18	129	60-140	4	30	
Acetone	25.00	23.98	96	48-130	5	41	
1,1-Dichloroethene	25.00	27.76	111	68-133	1	20	
Methylene Chloride	25.00	26.94	106	71-120	1	20	
Carbon Disulfide	25.00	26.28	105	56-120	3	20	
MTBE	25.00	25.07	100	58-120	2	21	
trans-1,2-Dichloroethene	25.00	28.24	113	80-120	2	24	
Vinyl Acetate	25.00	24.61	98	63-124	0	24	
1,1-Dichloroethane	25.00	27.38	110	77-120	3	20	
2-Butanone	25.00	24.07	96	57-120	2	32	
cis-1,2-Dichloroethene	25.00	26.43	106	75-120	2	20	
2,2-Dichloropropane	25.00	27.44	110	72-128	3	24	
Chloroform	25.00	24.72	98	78-120	3	20	
Bromochloromethane	25.00	26.88	108	78-120	2	20	
1,1,1-Trichloroethane	25.00	26.42	106	78-120	4	20	
1,1-Dichloropropene	25.00	26.16	105	75-120	2	21	
Carbon Tetrachloride	25.00	23.90	96	80-120	3	21	
1,2-Dichloroethane	25.00	23.54	94	74-120	2	20	
Benzene	25.00	26.27	105	77-120	2	20	
Trichloroethene	25.00	24.84	99	78-122	3	20	
1,2-Dichloropropane	25.00	25.13	101	76-120	2	20	
Bromodichloromethane	25.00	24.74	99	78-120	1	20	
Dibromomethane	25.00	24.35	97	77-120	1	20	
4-Methyl-2-Pentanone	25.00	21.17	85	65-120	0	22	
cis-1,3-Dichloropropene	25.00	26.38	106	76-120	1	20	
Toluene	25.00	25.38	100	73-120	2	20	
trans-1,3-Dichloropropene	25.00	23.28	93	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.46	102	76-120	0	20	
2-Hexanone	25.00	20.17 b	81	57-121	1	25	V9
1,3-Dichloropropane	25.00	25.43	102	75-120	1	20	
Tetrachloroethene	25.00	23.62	94	77-120	3	20	
Dibromochloromethane	25.00	24.22	97	76-120	0	20	
1,2-Dibromoethane	25.00	24.55	98	77-120	1	20	
Chlorobenzene	25.00	24.47	98	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	23.74	95	77-120	2	20	
Ethylbenzene	25.00	25.52	102	78-120	3	26	
m,p-Xylenes	50.00	52.06	104	77-120	3	20	
o-Xylene	25.00	24.87	99	77-120	4	20	
Styrene	25.00	25.65	103	77-120	4	20	
Bromoform	25.00	21.99	88	74-121	2	21	
Isopropylbenzene	25.00	23.34	93	71-120	1	20	
1,1,2,2-Tetrachloroethane	25.00	25.64	103	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	26.64	107	72-120	2	20	
Propylbenzene	25.00	26.01	104	76-120	2	20	
Bromobenzene	25.00	24.70	99	75-120	1	20	
1,3,5-Trimethylbenzene	25.00	26.85	107	77-120	1	20	
2-Chlorotoluene	25.00	27.09	108	76-120	0	20	
4-Chlorotoluene	25.00	25.94	104	78-120	2	20	
tert-Butylbenzene	25.00	23.48	94	76-120	5	21	
1,2,4-Trimethylbenzene	25.00	26.76	107	77-120	0	20	
sec-Butylbenzene	25.00	23.55	94	80-120	4	21	
para-Isopropyl Toluene	25.00	23.59	94	76-120	1	20	
1,3-Dichlorobenzene	25.00	24.65	99	75-120	2	20	
1,4-Dichlorobenzene	25.00	24.45	98	77-120	1	23	
n-Butylbenzene	25.00	31.68	127 *	76-120	1	21	M1
1,2-Dichlorobenzene	25.00	24.99	100	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	25.12	100	65-120	5	22	
1,2,4-Trichlorobenzene	25.00	23.49	94	73-121	0	20	
Hexachlorobutadiene	25.00	22.28	89	73-123	1	25	
Naphthalene	25.00	26.42	106	62-121	4	32	
1,2,3-Trichlorobenzene	25.00	24.86	99	66-123	3	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA06 Run Name : BFB IDF : 1.0
Seqnum : 459372161010 File : fif10 Time : 15-SEP-2009 15:35

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	153237	19.37	
75	30% - 60% of mass 95	381171	48.19	
95		791040	100.00	
96	5% - 9% of mass 95	52013	6.58	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	620672	78.46	
175	5% - 9% of mass 174	46290	7.46	
176	> 95% and < 101% of mass 174	607317	97.85	
177	5% - 9% of mass 176	40845	6.73	

Analyst: MJD Date: 09/16/09 Reviewer: LW Date: 09/17/09

CURTIS & TOMPKINS BFB TUNE FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA06 Run Name : BFB IDF : 1.0
Seqnum : 459373649002 File : fig02 Time : 16-SEP-2009 12:19

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	57864	20.72	
75	30% - 60% of mass 95	136205	48.78	
95		279232	100.00	
96	5% - 9% of mass 95	18949	6.79	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	220970	79.13	
175	5% - 9% of mass 174	17461	7.90	
176	> 95% and < 101% of mass 174	213098	96.44	
177	5% - 9% of mass 176	12781	6.00	

Analyst: MJD Date: 09/16/09 Reviewer: LW Date: 09/17/09

CURTIS & TOMPKINS BFB TUNE FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA06 Run Name : BFB IDF : 1.0
Seqnum : 459376438006 File : fii06 Time : 18-SEP-2009 12:54

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	43890	18.63	
75	30% - 60% of mass 95	107111	45.47	
95		235562	100.00	
96	5% - 9% of mass 95	13944	5.92	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	185834	78.89	
175	5% - 9% of mass 174	13673	7.36	
176	> 95% and < 101% of mass 174	184490	99.28	
177	5% - 9% of mass 176	11519	6.24	

Analyst: MJD Date: 09/18/09 Reviewer: LW Date: 09/21/09

CURTIS & TOMPKINS BFB TUNE FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839378097002 File : kij02 Time : 19-SEP-2009 14:43

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	27528	17.24	
75	30% - 60% of mass 95	79941	50.08	
95		159637	100.00	
96	5% - 9% of mass 95	11658	7.30	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	118600	74.29	
175	5% - 9% of mass 174	8746	7.37	
176	> 95% and < 101% of mass 174	114722	96.73	
177	5% - 9% of mass 176	7271	6.34	

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/21/09

CURTIS & TOMPKINS BFB TUNE FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839382075009 File : kim09 Time : 22-SEP-2009 11:11

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13985	15.86	
75	30% - 60% of mass 95	40908	46.38	
95		88202	100.00	
96	5% - 9% of mass 95	5034	5.71	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	66128	74.97	
175	5% - 9% of mass 174	4773	7.22	
176	> 95% and < 101% of mass 174	64261	97.18	
177	5% - 9% of mass 176	4364	6.79	

Analyst: BO Date: 09/22/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214804 MSVOA Water: EPA 8260B

Inst : MSVOA06 Name : 826GOX6W
Calnum : 459372161003 Date : 15-SEP-2009 17:14 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	fif13	459372161013		15-SEP-2009 17:14	S12733 (2000000X), S12773 (2000000X), S12565 (2000000X), S12634 (1000000X), S12892 (1000X)
L2	fif14	459372161014		15-SEP-2009 17:48	S12733 (1000000X), S12773 (1000000X), S12565 (1000000X), S12634 (500000X), S12892 (1000X)
L3	fif15	459372161015		15-SEP-2009 18:22	S12733 (250000X), S12773 (250000X), S12565 (500000X), S12634 (250000X), S12892 (1000X)
L4	fif16	459372161016		15-SEP-2009 18:56	S12733 (100000X), S12773 (100000X), S12565 (200000X), S12634 (100000X), S12892 (1000X)
L5	fif17	459372161017		15-SEP-2009 19:30	S12733 (50000X), S12773 (50000X), S12565 (100000X), S12634 (50000X), S12892 (1000X)
L6	fif18	459372161018		15-SEP-2009 20:05	S12733 (25000X), S12773 (25000X), S12565 (50000X), S12634 (25000X), S12892 (1000X)
L7	fif19	459372161019		15-SEP-2009 20:39	S12733 (10000X), S12773 (10000X), S12565 (20000X), S12634 (10000X), S12892 (1000X)
L8	fif20	459372161020		15-SEP-2009 21:13	S12733 (6667X), S12773 (6667X), S12565 (13330X), S12634 (6667X), S12892 (1000X)
L9	fif21	459372161021		15-SEP-2009 21:47	S12733 (5000X), S12773 (5000X), S12565 (10000X), S12634 (5000X), S12892 (1000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		1.3219	1.0968m	1.1605m	1.0354	1.2966	1.1530	1.2092	1.1044	AVRG		0.85308		1.1722	8	15	0.05	0.99	
Chloromethane		1.2073	1.1389	1.2595	1.1267	1.3178	1.2402	1.2484	1.1871	AVRG		0.82256		1.2157	5	15	0.10	0.99	
Vinyl Chloride	0.7116m	0.9844m	0.9363m	1.0412m	0.9357m	1.1206	1.0465	1.1022	1.0185	AVRG		1.01157		0.9886	12	15	0.05	0.99	
Bromomethane		0.5517m	0.4332m	0.5142	0.4454	0.4971	0.4571	0.4926	0.4737	AVRG		2.06992		0.4831	8	15	0.05	0.99	
Chloroethane		0.4869m	0.4847m	0.5308	0.4302	0.5243	0.4471	0.4631	0.4513	AVRG		2.09514		0.4773	8	15	0.05	0.99	
Trichlorofluoromethane		1.4734	1.5316	1.5756	1.3941	1.6388	1.3778	1.3509	1.2382	AVRG		0.69082		1.4475	9	15	0.05	0.99	
Acetone					0.3187	0.3738	0.3322	0.3394	0.3088	AVRG		2.98899		0.3346	7	15	0.05	0.99	
1,1-Dichloroethene		0.4933	0.4640	0.4805	0.4563	0.5151	0.4537	0.4843	0.4967	AVRG		2.08122		0.4805	4	15	0.05	0.99	
Iodomethane		0.4253	0.4112	0.4701	0.4761	0.5187	0.5297	0.5139	0.5292	AVRG		2.06495		0.4843	10	15	0.05	0.99	
Methylene Chloride		0.9110	0.7890	0.7138	0.6921	0.7508	0.6636	0.6580	0.6701	AVRG		1.36789		0.7311	12	15	0.05	0.99	
Carbon Disulfide		1.8944	1.7553	1.8280	1.7572	1.8871	1.6582	1.7354	1.7308	AVRG		0.56155		1.7808	5	15	0.05	0.99	
MTBE		1.7064	1.9603	2.1260	2.0613	2.4153	2.0922	2.1238	2.0355	AVRG		0.48424		2.0651	10	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5473	0.5268	0.5610	0.5504	0.6570	0.5360	0.5644	0.5745	AVRG		1.77093		0.5647	7	15	0.05	0.99	
Vinyl Acetate			1.1015	1.2146	1.4346	1.6968	1.3818	1.0922		QUAD	3.57961	0.17376	0.008108	1.3203	0.991	15	0.05	0.99	
1,1-Dichloroethane		1.2307	1.1929	1.2570	1.2714	1.3808	1.2210	1.1797	1.1663	AVRG		0.80808		1.2375	6	15	0.10	0.99	
2-Butanone			0.3471	0.4463	0.3669	0.4638	0.3919	0.4030	0.3973	AVRG		2.48560		0.4023	10	15	0.05	0.99	
2,2-Dichloropropane		0.9920	0.9894	1.0218	0.9733	1.0851	0.9177	0.9173	0.8897	AVRG		1.02742		0.9733	7	15	0.05	0.99	
cis-1,2-Dichloroethene		0.8285	0.6371	0.6394	0.6186	0.7150	0.6312	0.6665	0.6692	AVRG		1.47998		0.6757	10	15	0.05	0.99	
Chloroform		2.1455	1.6640	1.5011	1.4312	1.5914	1.4258			QUAD	0.23855	0.59546	0.001422	1.6265	0.999	15	0.05	0.99	
Bromochloromethane		0.2949	0.3153	0.3793	0.3699	0.4004	0.3728	0.3715	0.3604	AVRG		2.79285		0.3581	10	15	0.05	0.99	
1,1,1-Trichloroethane		1.2166	1.2551	1.3269	1.2076	1.2496	1.0798	1.0718	0.9886	AVRG		0.85142		1.1745	10	15	0.05	0.99	
1,1-Dichloropropene		0.4555	0.5039	0.4826	0.4946	0.4930	0.4557	0.4753	0.4702	AVRG		2.08829		0.4789	4	15	0.05	0.99	
Carbon Tetrachloride		0.5019	0.6092	0.6265	0.6293	0.6029	0.5356	0.5515	0.5344	AVRG		1.74242		0.5739	8	15	0.05	0.99	
1,2-Dichloroethane		0.7967	0.8387	0.7774	0.7852	0.8661	0.8045	0.7088	0.6478	AVRG		1.28512		0.7781	9	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.2872	1.3919	1.3048	1.3138	1.4644	1.3383	1.3509	1.3759	AVRG		0.73888		1.3534	4	15	0.05	0.99	
Trichloroethene		0.4068	0.3705	0.3926	0.3725	0.4066	0.3724	0.3925	0.3974	AVRG		2.57121		0.3889	4	15	0.05	0.99	
1,2-Dichloropropane		0.3779	0.3532	0.3854	0.3760	0.4142	0.3907	0.3861	0.3854	AVRG		2.60678		0.3836	4	15	0.05	0.99	
Bromodichloromethane		0.6915	0.6805	0.6588	0.6724	0.7253	0.6780	0.6393	0.6014	AVRG		1.49610		0.6684	5	15	0.05	0.99	
Dibromomethane		0.3637	0.3165	0.3113	0.3127	0.3524	0.3328	0.3311	0.3141	AVRG		3.03627		0.3294	6	15	0.05	0.99	
4-Methyl-2-Pentanone				0.4171	0.4320	0.5299	0.5079	0.5026	0.5139	AVRG		2.06659		0.4839	10	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5540	0.6130	0.6103	0.6276	0.7356	0.6865	0.6528	0.6666	AVRG		1.55444		0.6433	9	15	0.05	0.99	
Toluene		0.9156	0.8690	0.8540	0.8920	0.9776	0.8532	0.8714	0.8691	AVRG		1.12645		0.8877	5	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6003	0.6208	0.7072	0.6929	0.7897	0.7394	0.6868	0.6802	AVRG		1.44999		0.6897	9	15	0.05	0.99	
1,1,2-Trichloroethane		0.2101	0.1862	0.2189	0.2232	0.2484	0.2274	0.2174	0.2211	AVRG		4.56456		0.2191	8	15	0.05	0.99	
2-Hexanone				0.3388	0.3171	0.4323	0.3687	0.3728	0.3684	AVRG		2.72974		0.3663	11	15	0.05	0.99	
1,3-Dichloropropane		0.6931	0.7014	0.7194	0.6834	0.7877	0.6890	0.6897	0.6720	AVRG		1.41954		0.7045	5	15	0.05	0.99	
Tetrachloroethene		0.3816	0.3551	0.3841	0.3780	0.3841	0.3234	0.3757	0.3833	AVRG		2.69772		0.3707	6	15	0.05	0.99	
Dibromochloromethane		0.5650	0.5455	0.5827	0.5737	0.6430	0.5758	0.5704	0.5447	AVRG		1.73886		0.5751	5	15	0.05	0.99	
1,2-Dibromoethane		0.4461	0.4435	0.4667	0.4590	0.5433	0.4793	0.4880	0.4774	AVRG		2.10340		0.4754	7	15	0.05	0.99	
Chlorobenzene		1.1879	0.9845	1.0651	1.0396	1.1715	1.0847	1.0605	1.0561	AVRG		0.92486		1.0812	6	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.4831	0.4790	0.5049	0.4703	0.5350	0.4912	0.4716	0.4510	AVRG		2.05860		0.4858	5	15	0.05	0.99	
Ethylbenzene		1.7328	1.7137	1.8895	1.8392	2.0099	1.7073	1.8015	1.7145	AVRG		0.55522		1.8011	6	15	0.05	0.99	
m,p-Xylenes	0.5312	0.5466	0.5686	0.6204	0.6294	0.6965	0.6065	0.6514	0.6078	AVRG		1.64881		0.6065	9	15	0.05	0.99	
o-Xylene		0.6419	0.5583	0.6241	0.6618	0.7124	0.6571	0.6916	0.6611	AVRG		1.53606		0.6510	7	15	0.05	0.99	
Styrene		0.8384	0.8902	1.0469	1.1148	1.3418	1.2264	1.2549		LINR	0.42197	0.79433		1.1019	0.999	15	0.05	0.99	
Bromoform		0.3829	0.3724	0.4036	0.4339	0.5173	0.4787	0.4792	0.4513	AVRG		2.27319		0.4399	12	15	0.10	0.99	
Isopropylbenzene		2.5764	2.6569	2.6818	2.6368	2.6177	2.2449	2.5535	2.6211	AVRG		0.38855		2.5736	5	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.0685	1.0040	1.1039	1.0131	1.0847	0.9764	0.9454	0.9769	AVRG		0.97883		1.0216	6	15	0.30	0.99	
1,2,3-Trichloropropane		1.0349	1.0735	0.9472	0.9174	0.9936	0.8289m	0.8300m	0.8387	AVRG		1.07178		0.9330	10	15	0.05	0.99	
Propylbenzene		3.3390	3.3738	3.3742	3.3084	3.2293	2.6633	3.0519	2.9955	AVRG		0.31576		3.1669	8	15	0.05	0.99	
Bromobenzene		0.8674	0.8864	0.8702	0.8671	0.9245	0.8297	0.8751	0.8647	AVRG		1.14531		0.8731	3	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.6703	2.3232	2.3459	2.3729	2.4370	2.0315	2.1526	2.1486	AVRG		0.43285		2.3103	9	15	0.05	0.99	
2-Chlorotoluene		2.9321	2.5103	2.6276	2.6031	2.6239	2.2093	2.2381	2.2109	AVRG		0.40090		2.4944	10	15	0.05	0.99	
4-Chlorotoluene		2.7886	2.4023	2.4168	2.3111	2.3699	2.1812	2.1844	2.1516	AVRG		0.42540		2.3508	9	15	0.05	0.99	
tert-Butylbenzene		2.0187	1.9255	1.9192	1.8815	1.8253	1.5604	1.8413	1.9217	AVRG		0.53714		1.8617	7	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.3835	2.5341	2.3448	2.3373	2.4841	2.2423	2.2488	2.3783	AVRG		0.42209		2.3692	4	15	0.05	0.99	
sec-Butylbenzene		2.4719	2.5482	2.6713	2.7102	2.6707	2.2343	2.6445	2.7606	AVRG		0.38626		2.5890	7	15	0.05	0.99	
para-Isopropyl Toluene		1.9580	2.1904	2.1001	2.2198	2.2068	1.8874	2.1683	2.2905	AVRG		0.47000		2.1277	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.7553	1.4051	1.4711	1.4822	1.5773	1.4077	1.5041	1.5477	AVRG		0.65841		1.5188	7	15	0.05	0.99	
1,4-Dichlorobenzene		1.7624	1.6403	1.5955	1.5477	1.6756	1.5237	1.5748	1.5455	AVRG		0.62182		1.6082	5	15	0.05	0.99	
n-Butylbenzene		2.0039	1.8959	1.4774	1.6970	1.9316	1.6419	1.6701	1.9568	AVRG		0.56043		1.7843	11	15	0.05	0.99	
1,2-Dichlorobenzene		1.5537	1.4834	1.5175	1.5087	1.5978	1.4398	1.4946	1.5025	AVRG		0.66126		1.5123	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.2559m	0.2715m	0.2201m	0.2240	0.2620	0.2168	0.2127	0.2127	AVRG		4.26521		0.2345	10	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8330	0.8453	0.6249	0.7596	0.8903	0.8370	0.7500	0.9563	AVRG		1.23146		0.8120	12	15	0.05	0.99	
Hexachlorobutadiene		0.3976	0.3699	0.3948	0.3590	0.3636	0.2915	0.3623	0.3928	AVRG		2.72888		0.3665	9	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene			1.8454	1.2681	1.5762	2.1791	2.1910			LINR	1.65187	0.44008		1.8120	0.997	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.8480	0.7406	0.5974	0.6933	0.8713	0.7956	0.7586	0.9159	AVRG		1.28601		0.7776	13	15	0.05	0.99	
Dibromofluoromethane	0.7493	0.7647	0.7533	0.7672	0.7465	0.7596	0.7197	0.6819	0.6609	AVRG		1.36301		0.7337	5	15	0.05	0.99	
1,2-Dichloroethane-d4	0.5805	0.6116	0.6229	0.6001	0.5886	0.5809	0.5536	0.5131	0.4760	AVRG		1.75531		0.5697	8	15	0.05	0.99	
Toluene-d8	1.2814	1.2672	1.2188	1.3132	1.2576	1.2255	1.2174	1.2311	1.2296	AVRG		0.80059		1.2491	3	15	0.05	0.99	
Bromofluorobenzene	1.0699	1.1117	1.0761	1.0549	0.9922	0.9516	0.8986	0.8850	0.9091	AVRG		1.00568		0.9944	9	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	13	2.000	-6	5.000	-1	10.00	-12	20.00	11	50.00	-2	75.00	3	100.0	-6
Chloromethane			1.000	-1	2.000	-6	5.000	4	10.00	-7	20.00	8	50.00	2	75.00	3	100.0	-2
Vinyl Chloride	0.500	-28	1.000	0	2.000	-5	5.000	5	10.00	-5	20.00	13	50.00	6	75.00	11	100.0	3
Bromomethane			1.000	14	2.000	-10	5.000	6	10.00	-8	20.00	3	50.00	-5	75.00	2	100.0	-2
Chloroethane			1.000	2	2.000	2	5.000	11	10.00	-10	20.00	10	50.00	-6	75.00	-3	100.0	-5
Trichlorofluoromethane			1.000	2	2.000	6	5.000	9	10.00	-4	20.00	13	50.00	-5	75.00	-7	100.0	-14
Acetone									10.00	-5	20.00	12	50.00	-1	75.00	1	100.0	-8
1,1-Dichloroethene			0.500	3	2.000	-3	5.000	0	10.00	-5	20.00	7	50.00	-6	75.00	1	100.0	3
Iodomethane			0.500	-12	2.000	-15	5.000	-3	10.00	-2	20.00	7	50.00	9	75.00	6	100.0	9
Methylene Chloride			0.500	25	2.000	8	5.000	-2	10.00	-5	20.00	3	50.00	-9	75.00	-10	100.0	-8
Carbon Disulfide			0.500	6	2.000	-1	5.000	3	10.00	-1	20.00	6	50.00	-7	75.00	-3	100.0	-3
MTBE			0.500	-17	2.000	-5	5.000	3	10.00	0	20.00	17	50.00	1	75.00	3	100.0	-1
trans-1,2-Dichloroethene			0.500	-3	2.000	-7	5.000	-1	10.00	-3	20.00	16	50.00	-5	75.00	0	100.0	2
Vinyl Acetate					2.000	100	5.000	-1	10.00	-23	20.00	-6	50.00	9	75.00	-4		
1,1-Dichloroethane			0.500	-1	2.000	-4	5.000	2	10.00	3	20.00	12	50.00	-1	75.00	-5	100.0	-6
2-Butanone					2.000	-14	5.000	11	10.00	-9	20.00	15	50.00	-3	75.00	0	100.0	-1
2,2-Dichloropropane			0.500	2	2.000	2	5.000	5	10.00	0	20.00	11	50.00	-6	75.00	-6	100.0	-9
cis-1,2-Dichloroethene			0.500	23	2.000	-6	5.000	-5	10.00	-8	20.00	6	50.00	-7	75.00	-1	100.0	-1
Chloroform			0.500	76	2.000	12	5.000	-4	10.00	-9	20.00	3	50.00	0				
Bromochloromethane			0.500	-18	2.000	-12	5.000	6	10.00	3	20.00	12	50.00	4	75.00	4	100.0	1
1,1,1-Trichloroethane			0.500	4	2.000	7	5.000	13	10.00	3	20.00	6	50.00	-8	75.00	-9	100.0	-16
1,1-Dichloropropene			0.500	-5	2.000	5	5.000	1	10.00	3	20.00	3	50.00	-5	75.00	-1	100.0	-2
Carbon Tetrachloride			0.500	-13	2.000	6	5.000	9	10.00	10	20.00	5	50.00	-7	75.00	-4	100.0	-7
1,2-Dichloroethane			0.500	2	2.000	8	5.000	0	10.00	1	20.00	11	50.00	3	75.00	-9	100.0	-17
Benzene			0.500	-5	2.000	3	5.000	-4	10.00	-3	20.00	8	50.00	-1	75.00	0	100.0	2
Trichloroethene			0.500	5	2.000	-5	5.000	1	10.00	-4	20.00	5	50.00	-4	75.00	1	100.0	2
1,2-Dichloropropane			0.500	-1	2.000	-8	5.000	0	10.00	-2	20.00	8	50.00	2	75.00	1	100.0	0
Bromodichloromethane			0.500	3	2.000	2	5.000	-1	10.00	1	20.00	9	50.00	1	75.00	-4	100.0	-10
Dibromomethane			0.500	10	2.000	-4	5.000	-5	10.00	-5	20.00	7	50.00	1	75.00	1	100.0	-5
4-Methyl-2-Pentanone							5.000	-14	10.00	-11	20.00	10	50.00	5	75.00	4	100.0	6
cis-1,3-Dichloropropene			0.500	-14	2.000	-5	5.000	-5	10.00	-2	20.00	14	50.00	7	75.00	1	100.0	4
Toluene			0.500	3	2.000	-2	5.000	-4	10.00	0	20.00	10	50.00	-4	75.00	-2	100.0	-2
trans-1,3-Dichloropropene			0.500	-13	2.000	-10	5.000	3	10.00	0	20.00	14	50.00	7	75.00	0	100.0	-1
1,1,2-Trichloroethane			0.500	-4	2.000	-15	5.000	0	10.00	2	20.00	13	50.00	4	75.00	-1	100.0	1
2-Hexanone							5.000	-8	10.00	-13	20.00	18	50.00	1	75.00	2	100.0	1
1,3-Dichloropropane			0.500	-2	2.000	0	5.000	2	10.00	-3	20.00	12	50.00	-2	75.00	-2	100.0	-5
Tetrachloroethene			0.500	3	2.000	-4	5.000	4	10.00	2	20.00	4	50.00	-13	75.00	1	100.0	3
Dibromochloromethane			0.500	-2	2.000	-5	5.000	1	10.00	0	20.00	12	50.00	0	75.00	-1	100.0	-5
1,2-Dibromoethane			0.500	-6	2.000	-7	5.000	-2	10.00	-3	20.00	14	50.00	1	75.00	3	100.0	0
Chlorobenzene			0.500	10	2.000	-9	5.000	-1	10.00	-4	20.00	8	50.00	0	75.00	-2	100.0	-2
1,1,1,2-Tetrachloroethane			0.500	-1	2.000	-1	5.000	4	10.00	-3	20.00	10	50.00	1	75.00	-3	100.0	-7
Ethylbenzene			0.500	-4	2.000	-5	5.000	5	10.00	2	20.00	12	50.00	-5	75.00	0	100.0	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-12	1.000	-10	4.000	-6	10.00	2	20.00	4	40.00	15	100.0	0	150.0	7	200.0	0
o-Xylene			0.500	-1	2.000	-14	5.000	-4	10.00	2	20.00	9	50.00	1	75.00	6	100.0	2
Styrene			0.500	51	2.000	-8	5.000	-8	10.00	-7	20.00	9	50.00	-2	75.00	0		
Bromoform			0.500	-13	2.000	-15	5.000	-8	10.00	-1	20.00	18	50.00	9	75.00	9	100.0	3
Isopropylbenzene			0.500	0	2.000	3	5.000	4	10.00	2	20.00	2	50.00	-13	75.00	-1	100.0	2
1,1,2,2-Tetrachloroethane			0.500	5	2.000	-2	5.000	8	10.00	-1	20.00	6	50.00	-4	75.00	-7	100.0	-4
1,2,3-Trichloropropane			0.500	11	2.000	15	5.000	2	10.00	-2	20.00	6	50.00	-11	75.00	-11	100.0	-10
Propylbenzene			0.500	5	2.000	7	5.000	7	10.00	4	20.00	2	50.00	-16	75.00	-4	100.0	-5
Bromobenzene			0.500	-1	2.000	2	5.000	0	10.00	-1	20.00	6	50.00	-5	75.00	0	100.0	-1
1,3,5-Trimethylbenzene			0.500	16	2.000	1	5.000	2	10.00	3	20.00	5	50.00	-12	75.00	-7	100.0	-7
2-Chlorotoluene			0.500	18	2.000	1	5.000	5	10.00	4	20.00	5	50.00	-11	75.00	-10	100.0	-11
4-Chlorotoluene			0.500	19	2.000	2	5.000	3	10.00	-2	20.00	1	50.00	-7	75.00	-7	100.0	-8
tert-Butylbenzene			0.500	8	2.000	3	5.000	3	10.00	1	20.00	-2	50.00	-16	75.00	-1	100.0	3
1,2,4-Trimethylbenzene			0.500	1	2.000	7	5.000	-1	10.00	-1	20.00	5	50.00	-5	75.00	-5	100.0	0
sec-Butylbenzene			0.500	-5	2.000	-2	5.000	3	10.00	5	20.00	3	50.00	-14	75.00	2	100.0	7
para-Isopropyl Toluene			0.500	-8	2.000	3	5.000	-1	10.00	4	20.00	4	50.00	-11	75.00	2	100.0	8
1,3-Dichlorobenzene			0.500	16	2.000	-7	5.000	-3	10.00	-2	20.00	4	50.00	-7	75.00	-1	100.0	2
1,4-Dichlorobenzene			0.500	10	2.000	2	5.000	-1	10.00	-4	20.00	4	50.00	-5	75.00	-2	100.0	-4
n-Butylbenzene			0.500	12	2.000	6	5.000	-17	10.00	-5	20.00	8	50.00	-8	75.00	-6	100.0	10
1,2-Dichlorobenzene			0.500	3	2.000	-2	5.000	0	10.00	0	20.00	6	50.00	-5	75.00	-1	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	9	2.000	16	5.000	-6	10.00	-4	20.00	12	50.00	-8	75.00	-9	100.0	-9
1,2,4-Trichlorobenzene			0.500	3	2.000	4	5.000	-23	10.00	-6	20.00	10	50.00	3	75.00	-8	100.0	18
Hexachlorobutadiene			0.500	9	2.000	1	5.000	8	10.00	-2	20.00	-1	50.00	-20	75.00	-1	100.0	7
Naphthalene					2.000	64	5.000	-11	10.00	-14	20.00	4	50.00	0				
1,2,3-Trichlorobenzene			0.500	9	2.000	-5	5.000	-23	10.00	-11	20.00	12	50.00	2	75.00	-2	100.0	18
Dibromofluoromethane	50.00	2	50.00	4	50.00	3	50.00	5	50.00	2	50.00	4	50.00	-2	50.00	-7	50.00	-10
1,2-Dichloroethane-d4	50.00	2	50.00	7	50.00	9	50.00	5	50.00	3	50.00	2	50.00	-3	50.00	-10	50.00	-16
Toluene-d8	50.00	3	50.00	1	50.00	-2	50.00	5	50.00	1	50.00	-2	50.00	-3	50.00	-1	50.00	-2
Bromofluorobenzene	50.00	8	50.00	12	50.00	8	50.00	6	50.00	0	50.00	-4	50.00	-10	50.00	-11	50.00	-9

MJD 09/17/09 : Integrated 100 PPB point to select peaks with new RTs due to clipped column. Processed the rest of the points with the new RTs and integrated to include tailing, fronting, and to account for baseline noise.

MJD 09/17/09 : High low point requants in Naphthalene, Styrene and Chloroform OK per SJD.

LW 09/17/09 [Vinyl Acetate]: Does not meet 8260C criteria

LW 09/17/09 [Chloroform]: Does not meet 8260C criteria

LW 09/17/09 [Styrene]: Does not meet 8260C criteria

LW 09/17/09 [Naphthalene]: Does not meet 8260C criteria

Analyst: MJD Date: 09/17/09 Reviewer: LW Date: 09/17/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA06 Name : 826GOX6W
Calnum : 459372161003 Cal Date : 15-SEP-2009 Type : WATER

ICV 459372161023 (fif23 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12892 (1000X)
ICV 459373649003 (fig03 16-SEP-2009) stds: S12923 (10000X), S12892 (1000X)

Analyte	ICV Seqnum	Date	Spiked	Quant	Units	%D	Max	Flags
Freon 12	459373649003	16-SEP-2009	25.00	32.57	ug/L	**30**	25	v+
Chloromethane	459373649003	16-SEP-2009	25.00	26.17	ug/L	5	25	
Vinyl Chloride	459373649003	16-SEP-2009	25.00	28.57	ug/L	14	25	
Bromomethane	459373649003	16-SEP-2009	25.00	28.55	ug/L	14	25	
Chloroethane	459373649003	16-SEP-2009	25.00	31.37	ug/L	**25**	25	
Trichlorofluoromethane	459373649003	16-SEP-2009	25.00	30.99	ug/L	**24**	25	
Acetone	459372161023	15-SEP-2009	25.00	22.42	ug/L	-10	25	
1,1-Dichloroethene	459372161023	15-SEP-2009	25.00	29.77	ug/L	19	25	
Iodomethane	459372161023	15-SEP-2009	25.00	24.08	ug/L	-4	25	
Methylene Chloride	459372161023	15-SEP-2009	25.00	25.17	ug/L	1	25	
Carbon Disulfide	459372161023	15-SEP-2009	25.00	25.43	ug/L	2	25	
MTBE	459372161023	15-SEP-2009	25.00	25.47	ug/L	2	25	
trans-1,2-Dichloroethene	459372161023	15-SEP-2009	25.00	27.49	ug/L	10	25	
Vinyl Acetate	459372161023	15-SEP-2009	25.00	14.78	ug/L	**-41**	25	v-
1,1-Dichloroethane	459372161023	15-SEP-2009	25.00	25.49	ug/L	2	25	
2-Butanone	459372161023	15-SEP-2009	25.00	23.34	ug/L	-7	25	
2,2-Dichloropropane	459372161023	15-SEP-2009	25.00	23.33	ug/L	-7	25	
cis-1,2-Dichloroethene	459372161023	15-SEP-2009	25.00	25.68	ug/L	3	25	
Chloroform	459372161023	15-SEP-2009	25.00	23.10	ug/L	-8	25	
Bromochloromethane	459372161023	15-SEP-2009	25.00	27.38	ug/L	10	25	
1,1,1-Trichloroethane	459372161023	15-SEP-2009	25.00	24.68	ug/L	-1	25	
1,1-Dichloropropene	459372161023	15-SEP-2009	25.00	27.77	ug/L	11	25	
Carbon Tetrachloride	459372161023	15-SEP-2009	25.00	26.49	ug/L	6	25	
1,2-Dichloroethane	459372161023	15-SEP-2009	25.00	23.42	ug/L	-6	25	
Benzene	459372161023	15-SEP-2009	25.00	26.76	ug/L	7	25	
Trichloroethene	459372161023	15-SEP-2009	25.00	27.37	ug/L	9	25	
1,2-Dichloropropane	459372161023	15-SEP-2009	25.00	25.34	ug/L	1	25	
Bromodichloromethane	459372161023	15-SEP-2009	25.00	24.73	ug/L	-1	25	
Dibromomethane	459372161023	15-SEP-2009	25.00	24.85	ug/L	-1	25	
4-Methyl-2-Pentanone	459372161023	15-SEP-2009	25.00	25.98	ug/L	4	25	
cis-1,3-Dichloropropene	459372161023	15-SEP-2009	25.00	27.05	ug/L	8	25	
Toluene	459372161023	15-SEP-2009	25.00	26.49	ug/L	6	25	
trans-1,3-Dichloropropene	459372161023	15-SEP-2009	25.00	24.54	ug/L	-2	25	
1,1,2-Trichloroethane	459372161023	15-SEP-2009	25.00	28.72	ug/L	15	25	
2-Hexanone	459372161023	15-SEP-2009	25.00	25.01	ug/L	0	25	
1,3-Dichloropropane	459372161023	15-SEP-2009	25.00	26.16	ug/L	5	25	
Tetrachloroethene	459372161023	15-SEP-2009	25.00	28.03	ug/L	12	25	
Dibromochloromethane	459372161023	15-SEP-2009	25.00	25.80	ug/L	3	25	
1,2-Dibromoethane	459372161023	15-SEP-2009	25.00	26.55	ug/L	6	25	
Chlorobenzene	459372161023	15-SEP-2009	25.00	25.75	ug/L	3	25	
1,1,1,2-Tetrachloroethane	459372161023	15-SEP-2009	25.00	25.61	ug/L	2	25	
Ethylbenzene	459372161023	15-SEP-2009	25.00	27.46	ug/L	10	25	
m,p-Xylenes	459372161023	15-SEP-2009	50.00	57.57	ug/L	15	25	
o-Xylene	459372161023	15-SEP-2009	25.00	27.72	ug/L	11	25	
Styrene	459372161023	15-SEP-2009	25.00	26.48	ug/L	6	25	
Bromoform	459372161023	15-SEP-2009	25.00	27.12	ug/L	8	25	
Isopropylbenzene	459372161023	15-SEP-2009	25.00	24.64	ug/L	-1	25	

Analyte	ICV Seqnum	Date	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	459372161023	15-SEP-2009	25.00	25.13	ug/L	1	25	
1,2,3-Trichloropropane	459372161023	15-SEP-2009	25.00	24.36	ug/L	-3	25	
Propylbenzene	459372161023	15-SEP-2009	25.00	26.83	ug/L	7	25	
Bromobenzene	459372161023	15-SEP-2009	25.00	27.69	ug/L	11	25	
1,3,5-Trimethylbenzene	459372161023	15-SEP-2009	25.00	26.46	ug/L	6	25	
2-Chlorotoluene	459372161023	15-SEP-2009	25.00	25.53	ug/L	2	25	
4-Chlorotoluene	459372161023	15-SEP-2009	25.00	25.73	ug/L	3	25	
tert-Butylbenzene	459372161023	15-SEP-2009	25.00	26.41	ug/L	6	25	
1,2,4-Trimethylbenzene	459372161023	15-SEP-2009	25.00	25.08	ug/L	0	25	
sec-Butylbenzene	459372161023	15-SEP-2009	25.00	29.03	ug/L	16	25	
para-Isopropyl Toluene	459372161023	15-SEP-2009	25.00	27.74	ug/L	11	25	
1,3-Dichlorobenzene	459372161023	15-SEP-2009	25.00	26.24	ug/L	5	25	
1,4-Dichlorobenzene	459372161023	15-SEP-2009	25.00	26.07	ug/L	4	25	
n-Butylbenzene	459372161023	15-SEP-2009	25.00	27.30	ug/L	9	25	
1,2-Dichlorobenzene	459372161023	15-SEP-2009	25.00	26.98	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	459372161023	15-SEP-2009	25.00	22.99	ug/L	-8	25	
1,2,4-Trichlorobenzene	459372161023	15-SEP-2009	25.00	25.31	ug/L	1	25	
Hexachlorobutadiene	459372161023	15-SEP-2009	25.00	27.03	ug/L	8	25	
Naphthalene	459372161023	15-SEP-2009	25.00	21.45	ug/L	-14	25	
1,2,3-Trichlorobenzene	459372161023	15-SEP-2009	25.00	26.70	ug/L	7	25	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214804 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA06 Run Name : QC512617 IDF : 1.0
Seqnum : 459376438007.5 File : fii07 Time : 18-SEP-2009 13:31
Cal : 459372161003 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12693 (10000X), S12589 (10000X), S12845 (10000X), S12833 (10000X), S12892 (1000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	1.1722	1.5218	25.00	32.46	ug/L	**30**	20	0.0500	c+ u v+ ***
Chloromethane	1.2157	1.2324	25.00	25.34	ug/L	1	20	0.1000	u
Vinyl Chloride	0.9886	1.0356	25.00	26.19	ug/L	5	20	0.0500	u
Bromomethane	0.4831	0.5673	25.00	29.35	ug/L	17	20	0.0500	u
Chloroethane	0.4773	0.4812	25.00	25.20	ug/L	1	20	0.0500	u
Trichlorofluoromethane	1.4475	1.6490	25.00	28.48	ug/L	14	20	0.0500	u
Iodomethane	0.4843	0.6470	25.00	33.40	ug/L	**34**	20	0.0500	c+ u ***
Acetone	0.3346	0.3449	25.00	25.77	ug/L	3	20	0.0500	u
1,1-Dichloroethene	0.4805	0.5003	25.00	26.03	ug/L	4	20	0.0500	u
Methylene Chloride	0.7311	0.6418	25.00	21.95	ug/L	-12	20	0.0500	u
Carbon Disulfide	1.7808	1.7464	25.00	24.52	ug/L	-2	20	0.0500	u
MTBE	2.0651	2.2006	25.00	26.64	ug/L	7	20	0.0500	u
trans-1,2-Dichloroethene	0.5647	0.6067	25.00	26.86	ug/L	7	20	0.0500	u
Vinyl Acetate	1.3203	1.5743	25.00	22.98	ug/L	-8	20	0.0500	u v- ***
1,1-Dichloroethane	1.2375	1.3174	25.00	26.61	ug/L	6	20	0.1000	u
2-Butanone	0.4023	0.3997	25.00	24.84	ug/L	-1	20	0.0500	m u
cis-1,2-Dichloroethene	0.6757	0.6550	25.00	24.24	ug/L	-3	20	0.0500	u
2,2-Dichloropropane	0.9733	1.2100	25.00	31.08	ug/L	**24**	20	0.0500	c+ u ***
Chloroform	1.6265	1.5381	25.00	25.24	ug/L	1	20	0.0500	u
Bromochloromethane	0.3581	0.3636	25.00	25.39	ug/L	2	20	0.0500	u
1,1,1-Trichloroethane	1.1745	1.3963	25.00	29.72	ug/L	19	20	0.0500	u
1,1-Dichloropropene	0.4789	0.5582	25.00	29.14	ug/L	17	20	0.0500	u
Carbon Tetrachloride	0.5739	0.7196	25.00	31.35	ug/L	**25**	20	0.0500	c+ u ***
1,2-Dichloroethane	0.7781	0.8508	25.00	27.33	ug/L	9	20	0.0500	u
Benzene	1.3534	1.3409	25.00	24.77	ug/L	-1	20	0.0500	u
Trichloroethene	0.3889	0.4063	25.00	26.12	ug/L	4	20	0.0500	u
1,2-Dichloropropane	0.3836	0.3510	25.00	22.88	ug/L	-8	20	0.0500	u
Bromodichloromethane	0.6684	0.6958	25.00	26.02	ug/L	4	20	0.0500	u
Dibromomethane	0.3294	0.3298	25.00	25.03	ug/L	0	20	0.0500	u
4-Methyl-2-Pentanone	0.4839	0.5081	25.00	26.25	ug/L	5	20	0.0500	u
cis-1,3-Dichloropropene	0.6433	0.7121	25.00	27.67	ug/L	11	20	0.0500	u
Toluene	0.8877	0.9052	25.00	25.49	ug/L	2	20	0.0500	u
trans-1,3-Dichloropropene	0.6897	0.7284	25.00	26.41	ug/L	6	20	0.0500	u
1,1,2-Trichloroethane	0.2191	0.2289	25.00	26.12	ug/L	4	20	0.0500	u
2-Hexanone	0.3663	0.3716	25.00	25.36	ug/L	1	20	0.0500	u
1,3-Dichloropropane	0.7045	0.7118	25.00	25.26	ug/L	1	20	0.0500	u
Tetrachloroethene	0.3707	0.4010	25.00	27.05	ug/L	8	20	0.0500	u
Dibromochloromethane	0.5751	0.6139	25.00	26.69	ug/L	7	20	0.0500	u
1,2-Dibromoethane	0.4754	0.5067	25.00	26.65	ug/L	7	20	0.0500	u
Chlorobenzene	1.0812	1.0519	25.00	24.32	ug/L	-3	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.4858	0.5185	25.00	26.68	ug/L	7	20	0.0500	u
Ethylbenzene	1.8011	2.0075	25.00	27.87	ug/L	11	20	0.0500	u
m,p-Xylenes	0.6065	0.6695	50.00	55.19	ug/L	10	20	0.0500	u
o-Xylene	0.6510	0.7067	25.00	27.14	ug/L	9	20	0.0500	u
Styrene	1.1019	1.2493	25.00	25.23	ug/L	1	20	0.0500	u
Bromoform	0.4399	0.4923	25.00	27.98	ug/L	12	20	0.1000	u
Isopropylbenzene	2.5736	2.4095	25.00	23.41	ug/L	-6	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	1.0216	0.9531	25.00	23.32	ug/L	-7	20	0.3000	u
1,2,3-Trichloropropane	0.9330	0.9058	25.00	24.27	ug/L	-3	20	0.0500	u
Propylbenzene	3.1669	3.2922	25.00	25.99	ug/L	4	20	0.0500	u
Bromobenzene	0.8731	0.8162	25.00	23.37	ug/L	-7	20	0.0500	u
1,3,5-Trimethylbenzene	2.3103	2.3548	25.00	25.48	ug/L	2	20	0.0500	u
2-Chlorotoluene	2.4944	2.4421	25.00	24.48	ug/L	-2	20	0.0500	u
4-Chlorotoluene	2.3508	2.3798	25.00	25.31	ug/L	1	20	0.0500	u
tert-Butylbenzene	1.8617	2.0050	25.00	26.92	ug/L	8	20	0.0500	u
1,2,4-Trimethylbenzene	2.3692	2.4437	25.00	25.79	ug/L	3	20	0.0500	u
sec-Butylbenzene	2.5890	3.0204	25.00	29.17	ug/L	17	20	0.0500	u
para-Isopropyl Toluene	2.1277	2.4760	25.00	29.09	ug/L	16	20	0.0500	m u
1,3-Dichlorobenzene	1.5188	1.4769	25.00	24.31	ug/L	-3	20	0.0500	u
1,4-Dichlorobenzene	1.6082	1.5588	25.00	24.23	ug/L	-3	20	0.0500	u
n-Butylbenzene	1.7843	2.2810	25.00	31.96	ug/L	**28**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.5123	1.5334	25.00	25.35	ug/L	1	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.2345	0.2469	25.00	26.33	ug/L	5	20	0.0500	u
1,2,4-Trichlorobenzene	0.8120	0.8491	25.00	26.14	ug/L	5	20	0.0500	u
Hexachlorobutadiene	0.3665	0.4466	25.00	30.47	ug/L	**22**	20	0.0500	c+ u ***
Naphthalene	1.8120	2.1499	25.00	25.31	ug/L	1	20	0.0500	u
1,2,3-Trichlorobenzene	0.7776	0.8765	25.00	28.18	ug/L	13	20	0.0500	u
Dibromofluoromethane	0.7337	0.8102	50.00	55.22	ug/L	10	20	0.0500	u
1,2-Dichloroethane-d4	0.5697	0.6497	50.00	57.02	ug/L	14	20	0.0500	u
Toluene-d8	1.2491	1.2990	50.00	52.00	ug/L	4	20	0.0500	u
Bromofluorobenzene	0.9944	0.9284	50.00	46.69	ug/L	-7	20	0.0500	u

ISTD (ICAL fif19)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	725850	678035	-6.59	13.12	13.15	0.04
1,4-Difluorobenzene	1173437	1158389	-1.28	14.47	14.50	0.04
Chlorobenzene-d5	1177615	1095776	-6.95	18.93	18.95	0.02
1,4-Dichlorobenzene-d4	832197	791151	-4.93	21.72	21.75	0.04

MJD 09/18/09 [2-Butanone]: Picked or reassigned peak . [general version]

MJD 09/18/09 [para-Isopropyl Toluene]: Picked or reassigned peak . [general version]

MJD 09/18/09 [tert-Butyl Alcohol (TBA)]: Picked or reassigned peak . [general version]

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

+=high bias -=low bias c=CCV m=manual integration u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC512765 IDF : 1.0
Seqnum : 839378097003.1 File : kij03 Time : 19-SEP-2009 15:06
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5052	25.00	23.59	ug/L	-6	20	0.0500	u
Chloromethane	0.5160	0.4546	25.00	22.02	ug/L	-12	20	0.1000	u
Vinyl Chloride	0.5175	0.4645	25.00	22.44	ug/L	-10	20	0.0500	u
Bromomethane	0.2608	0.2567	25.00	24.61	ug/L	-2	20	0.0500	u
Chloroethane	0.4094	0.4011	25.00	24.49	ug/L	-2	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6624	25.00	22.33	ug/L	-11	20	0.0500	u
Iodomethane	0.2599	0.3172	25.00	29.83	ug/L	19	20	0.0500	u
Acetone	0.1382	0.1283	25.00	23.21	ug/L	-7	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3836	25.00	25.59	ug/L	2	20	0.0500	u
Methylene Chloride	0.5280	0.5190	25.00	24.57	ug/L	-2	20	0.0500	u
Carbon Disulfide	1.4090	1.3581	25.00	24.10	ug/L	-4	20	0.0500	u
MTBE	1.5447	1.4935	25.00	24.17	ug/L	-3	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.4815	25.00	26.37	ug/L	5	20	0.0500	u
Vinyl Acetate	0.9726	0.9463	25.00	24.32	ug/L	-3	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9765	25.00	25.96	ug/L	4	20	0.1000	u
2-Butanone	0.2331	0.2217	25.00	23.77	ug/L	-5	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5285	25.00	24.29	ug/L	-3	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7588	25.00	26.59	ug/L	6	20	0.0500	u
Chloroform	0.9238	0.8795	25.00	23.80	ug/L	-5	20	0.0500	u
Bromochloromethane	0.2354	0.2349	25.00	24.94	ug/L	0	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7286	25.00	25.90	ug/L	4	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4323	25.00	25.63	ug/L	3	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3492	25.00	25.06	ug/L	0	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4293	25.00	24.44	ug/L	-2	20	0.0500	u
Benzene	1.3404	1.3663	25.00	25.48	ug/L	2	20	0.0500	u
Trichloroethene	0.3158	0.3117	25.00	24.68	ug/L	-1	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3595	25.00	25.00	ug/L	0	20	0.0500	u
Bromodichloromethane	0.3863	0.3882	25.00	25.12	ug/L	0	20	0.0500	u
Dibromomethane	0.1802	0.1763	25.00	24.46	ug/L	-2	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2714	25.00	22.29	ug/L	-11	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5503	25.00	26.62	ug/L	6	20	0.0500	u
Toluene	0.9593	0.9471	25.00	24.68	ug/L	-1	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5371	25.00	23.43	ug/L	-6	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1790	25.00	25.59	ug/L	2	20	0.0500	u
2-Hexanone	0.2445	0.2100	25.00	21.47	ug/L	-14	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6300	25.00	25.68	ug/L	3	20	0.0500	u
Tetrachloroethene	0.3329	0.3133	25.00	23.53	ug/L	-6	20	0.0500	u
Dibromochloromethane	0.3027	0.2969	25.00	24.52	ug/L	-2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2974	25.00	24.39	ug/L	-2	20	0.0500	u
Chlorobenzene	1.0519	1.0149	25.00	24.12	ug/L	-4	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3171	25.00	23.61	ug/L	-6	20	0.0500	u
Ethylbenzene	1.8115	1.8345	25.00	25.32	ug/L	1	20	0.0500	u
m,p-Xylenes	0.6304	0.6576	50.00	52.16	ug/L	4	20	0.0500	u
o-Xylene	0.6283	0.6283	25.00	25.00	ug/L	0	20	0.0500	u
Styrene	1.0367	1.0779	25.00	25.99	ug/L	4	20	0.0500	u
Bromoform	0.1849	0.1943	25.00	22.77	ug/L	-9	20	0.1000	u
Isopropylbenzene	3.8595	3.4145	25.00	22.12	ug/L	-12	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9336	25.00	24.35	ug/L	-3	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0448	25.00	25.52	ug/L	2	20	0.0500	u
Propylbenzene	3.9448	4.0245	25.00	25.51	ug/L	2	20	0.0500	u
Bromobenzene	1.0220	0.9372	25.00	22.92	ug/L	-8	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.8175	25.00	25.68	ug/L	3	20	0.0500	u
2-Chlorotoluene	3.1099	3.1722	25.00	25.50	ug/L	2	20	0.0500	u
4-Chlorotoluene	2.6572	2.6576	25.00	25.00	ug/L	0	20	0.0500	u
tert-Butylbenzene	2.1712	2.0869	25.00	24.03	ug/L	-4	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7043	25.00	25.62	ug/L	2	20	0.0500	u
sec-Butylbenzene	3.1284	3.0359	25.00	24.26	ug/L	-3	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.3576	25.00	23.63	ug/L	-5	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6093	25.00	23.80	ug/L	-5	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5604	25.00	23.58	ug/L	-6	20	0.0500	u
n-Butylbenzene	2.4331	2.4818	25.00	31.05	ug/L	**24**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.5698	25.00	24.35	ug/L	-3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1715	25.00	24.38	ug/L	-2	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	0.9573	25.00	22.00	ug/L	-12	20	0.0500	u
Hexachlorobutadiene	0.4373	0.4118	25.00	23.54	ug/L	-6	20	0.0500	u
Naphthalene	2.7279	2.6023	25.00	23.85	ug/L	-5	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9409	25.00	23.34	ug/L	-7	20	0.0500	u
Dibromofluoromethane	0.4472	0.4595	50.00	51.37	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3788	50.00	50.69	ug/L	1	20	0.0500	u
Toluene-d8	1.4811	1.5530	50.00	52.43	ug/L	5	20	0.0500	u
Bromofluorobenzene	1.2424	1.2158	50.00	48.93	ug/L	-2	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1271686	-15.52	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	2146436	-12.28	11.74	11.74	0.00
Chlorobenzene-d5	2136176	1874475	-12.25	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	788590	-19.82	17.10	17.10	0.00

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214804 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513025 IDF : 1.0
Seqnum : 839382075010.1 File : kim10 Time : 22-SEP-2009 11:24
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5374	25.00	25.09	ug/L	0	20	0.0500	u
Chloromethane	0.5160	0.4967	25.00	24.06	ug/L	-4	20	0.1000	u
Vinyl Chloride	0.5175	0.5211	25.00	25.18	ug/L	1	20	0.0500	u
Bromomethane	0.2608	0.3181	25.00	30.49	ug/L	**22**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4165	25.00	25.43	ug/L	2	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6672	25.00	22.49	ug/L	-10	20	0.0500	u
Iodomethane	0.2599	0.3068	25.00	28.96	ug/L	16	20	0.0500	u
Acetone	0.1382	0.1175	25.00	21.26	ug/L	-15	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3656	25.00	24.39	ug/L	-2	20	0.0500	u
Methylene Chloride	0.5280	0.5322	25.00	25.20	ug/L	1	20	0.0500	u
Carbon Disulfide	1.4090	1.3035	25.00	23.13	ug/L	-7	20	0.0500	u
MTBE	1.5447	1.4539	25.00	23.53	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.4808	25.00	26.34	ug/L	5	20	0.0500	u
Vinyl Acetate	0.9726	0.8755	25.00	22.50	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9426	25.00	25.06	ug/L	0	20	0.1000	u
2-Butanone	0.2331	0.2087	25.00	22.39	ug/L	-10	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5420	25.00	24.90	ug/L	0	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7002	25.00	24.54	ug/L	-2	20	0.0500	u
Chloroform	0.9238	0.8427	25.00	22.81	ug/L	-9	20	0.0500	u
Bromochloromethane	0.2354	0.2428	25.00	25.78	ug/L	3	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.6628	25.00	23.56	ug/L	-6	20	0.0500	u
1,1-Dichloropropene	0.4217	0.3928	25.00	23.29	ug/L	-7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.2997	25.00	21.51	ug/L	-14	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3866	25.00	22.00	ug/L	-12	20	0.0500	u
Benzene	1.3404	1.3296	25.00	24.80	ug/L	-1	20	0.0500	u
Trichloroethene	0.3158	0.2955	25.00	23.39	ug/L	-6	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3419	25.00	23.78	ug/L	-5	20	0.0500	u
Bromodichloromethane	0.3863	0.3622	25.00	23.44	ug/L	-6	20	0.0500	u
Dibromomethane	0.1802	0.1690	25.00	23.45	ug/L	-6	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2456	25.00	20.17	ug/L	-19	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5285	25.00	25.57	ug/L	2	20	0.0500	u
Toluene	0.9593	0.9242	25.00	24.09	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5168	25.00	22.55	ug/L	-10	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1725	25.00	24.65	ug/L	-1	20	0.0500	u
2-Hexanone	0.2445	0.1911	25.00	19.54	ug/L	**-22**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.6023	25.00	24.55	ug/L	-2	20	0.0500	u
Tetrachloroethene	0.3329	0.2934	25.00	22.04	ug/L	-12	20	0.0500	u
Dibromochloromethane	0.3027	0.2868	25.00	23.68	ug/L	-5	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2934	25.00	24.06	ug/L	-4	20	0.0500	u
Chlorobenzene	1.0519	0.9935	25.00	23.61	ug/L	-6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3071	25.00	22.87	ug/L	-9	20	0.0500	u
Ethylbenzene	1.8115	1.7256	25.00	23.81	ug/L	-5	20	0.0500	u
m,p-Xylenes	0.6304	0.6182	50.00	49.03	ug/L	-2	20	0.0500	u
o-Xylene	0.6283	0.5958	25.00	23.71	ug/L	-5	20	0.0500	u
Styrene	1.0367	1.0254	25.00	24.73	ug/L	-1	20	0.0500	u
Bromoform	0.1849	0.1874	25.00	22.01	ug/L	-12	20	0.1000	u
Isopropylbenzene	3.8595	3.3494	25.00	21.70	ug/L	-13	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9652	25.00	25.17	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0393	25.00	25.39	ug/L	2	20	0.0500	u
Propylbenzene	3.9448	3.7203	25.00	23.58	ug/L	-6	20	0.0500	u
Bromobenzene	1.0220	1.0012	25.00	24.49	ug/L	-2	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.7898	25.00	25.43	ug/L	2	20	0.0500	u
2-Chlorotoluene	3.1099	3.1506	25.00	25.33	ug/L	1	20	0.0500	u
4-Chlorotoluene	2.6572	2.6050	25.00	24.51	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.8614	25.00	21.43	ug/L	-14	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7503	25.00	26.06	ug/L	4	20	0.0500	u
sec-Butylbenzene	3.1284	2.6477	25.00	21.16	ug/L	-15	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.1983	25.00	22.04	ug/L	-12	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6155	25.00	23.90	ug/L	-4	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5576	25.00	23.54	ug/L	-6	20	0.0500	u
n-Butylbenzene	2.4331	2.3610	25.00	29.02	ug/L	16	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.5576	25.00	24.16	ug/L	-3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1679	25.00	23.86	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.0197	25.00	23.44	ug/L	-6	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3513	25.00	20.08	ug/L	-20	20	0.0500	u
Naphthalene	2.7279	2.8247	25.00	25.89	ug/L	4	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9918	25.00	24.60	ug/L	-2	20	0.0500	u
Dibromofluoromethane	0.4472	0.4622	50.00	51.68	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3432	50.00	45.92	ug/L	-8	20	0.0500	u
Toluene-d8	1.4811	1.5568	50.00	52.55	ug/L	5	20	0.0500	u
Bromofluorobenzene	1.2424	1.2647	50.00	50.90	ug/L	2	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1771090	17.66	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3063159	25.18	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2626334	22.95	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1004184	2.11	17.10	17.10	0.00

BO 09/22/09 : Standard ID fixed in LIMS [general version]

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 459376438

Date : 09/18/09 Reference : fif19
Sequence : MSVOA06 fii Analyzed : 09/15/09 20:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	725850	13.12	1173437	14.47	1177615	18.93	832197	21.72
		LOWER LIMIT	362925	12.62	586719	13.97	588808	18.43	416099	21.22
		UPPER LIMIT	1451700	13.62	2346874	14.97	2355230	19.43	1664394	22.22
007	CCV/BS	QC512617	678035	13.15	1158389	14.50	1095776	18.95	791151	21.75
008	BSD	QC512618	702847	13.14	1209559	14.48	1157679	18.94	779310	21.74
010	BLANK	QC512616	657291	13.14	1040804	14.50	976689	18.94	526355	21.74
011	SAMPLE	214907-016	600113	13.13	979871	14.48	930821	18.94	499782	21.73
012	SAMPLE	214907-017	601441	13.14	993390	14.49	917218	18.94	486910	21.74
013	SAMPLE	214804-008	591294	13.14	989478	14.49	898284	18.94	498943	21.74
014	SAMPLE	214804-009	578303	13.13	934701	14.48	845759	18.94	469640	21.74
015	SAMPLE	214804-010	572851	13.14	975483	14.49	904900	18.94	472842	21.73
016	SAMPLE	214804-011	563763	13.15	935728	14.49	859296	18.94	456322	21.74
017	MSS	214805-007	528930	13.14	923835	14.49	794257	18.95	445758	21.74
018	SAMPLE	214805-009	547428	13.14	905317	14.49	814223	18.94	454237	21.73
019	SAMPLE	214901-007	518638	13.13	867468	14.48	786564	18.93	424161	21.73
020	SAMPLE	214901-009	489405	13.13	850533	14.48	769029	18.94	418080	21.73
021	SAMPLE	214940-002	488495	13.13	857600	14.48	757857	18.94	394659 *	21.73
022	SAMPLE	214901-008	513648	13.13	845610	14.48	755834	18.93	413423 *	21.73
023	SAMPLE	214901-010	489797	13.13	832697	14.48	737893	18.94	414009 *	21.73
024	MS	QC512687	521673	13.13	874736	14.48	868390	18.94	637523	21.73
025	MSD	QC512688	558013	13.13	929855	14.48	915038	18.94	688771	21.73

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839378097

Date : 09/19/09 Reference : kif12
Sequence : MSVOA11 kij Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
003	CCV/BS	QC512765	1271686	10.81	2146436	11.74	1874475	14.82	788590	17.10
004	BSD	QC512766	1406833	10.81	2367793	11.74	2032455	14.82	835200	17.10
006	BLANK	QC512764	1331208	10.81	2268684	11.74	1916293	14.82	596028	17.10
007	SAMPLE	214803-001	1328332	10.81	2276854	11.74	1916101	14.82	599291	17.10
008	SAMPLE	214804-001	1316453	10.81	2257131	11.74	1898291	14.82	577005	17.10
009	SAMPLE	214804-002	1306936	10.81	2245693	11.74	1872873	14.82	574403	17.10
010	SAMPLE	214804-003	1262794	10.81	2179155	11.74	1836744	14.82	531759	17.10
011	SAMPLE	214804-004	1287859	10.81	2201261	11.74	1852420	14.82	584014	17.10
012	SAMPLE	214804-005	1262478	10.81	2183233	11.74	1835822	14.82	553973	17.10
013	SAMPLE	214804-006	1263672	10.81	2158913	11.74	1837222	14.82	592383	17.10
014	SAMPLE	214804-007	1260144	10.81	2166534	11.74	1834101	14.82	559383	17.10
015	SAMPLE	214803-002	1261858	10.81	2191629	11.74	1834422	14.82	568401	17.10
016	SAMPLE	214803-003	1240734	10.81	2156351	11.74	1805429	14.82	545930	17.10
017	MSS	214803-005	1235911	10.81	2147244	11.74	1804920	14.82	544191	17.10
018	SAMPLE	214803-006	1246310	10.81	2134045	11.74	1798075	14.82	570600	17.10
019	SAMPLE	214803-007	1243945	10.81	2153265	11.74	1799220	14.82	529329	17.10
020	SAMPLE	214803-008	1222831	10.81	2119458	11.74	1787141	14.82	547573	17.10
021	SAMPLE	214803-009	1218488	10.81	2110558	11.74	1778495	14.82	537719	17.10
022	SAMPLE	214803-010	1226055	10.81	2122185	11.74	1781942	14.82	551008	17.10
023	SAMPLE	214803-004	1216516	10.81	2100274	11.74	1769414	14.82	518065	17.10
024	MS	QC512786	1263374	10.81	2173784	11.74	1884390	14.82	793158	17.10
025	MSD	QC512787	1359357	10.81	2297826	11.74	1990978	14.82	823138	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839382075

Date : 09/22/09 Reference : kif12
Sequence : MSVOA11 kim Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
010	CCV/LCS	QC513025	1771090	10.81	3063159	11.74	2626334	14.82	1004184	17.10
012	BLANK	QC513026	1677689	10.81	2938196	11.74	2420292	14.82	683430	17.10
013	MSS	214805-007	1627599	10.81	2892984	11.74	2404486	14.82	690720	17.10
014	SAMPLE	214805-009	1565529	10.81	2757761	11.74	2302025	14.82	604953	17.10
015	SAMPLE	214804-009	1505672	10.81	2669448	11.74	2197601	14.82	618082	17.10
016	SAMPLE	214804-011	1472585	10.81	2635877	11.74	2197171	14.82	646353	17.10
017	MS	QC513027	1510323	10.81	2678148	11.74	2313548	14.82	929714	17.10
018	MSD	QC513028	1575123	10.81	2772606	11.74	2395237	14.82	921218	17.10
020	SAMPLE	214846-004	1562873	10.81	2775408	11.74	2321901	14.82	639407	17.10
021	SAMPLE	214846-011	1507399	10.81	2695223	11.74	2258483	14.82	634750	17.10
022	SAMPLE	214846-001	1500905	10.81	2683520	11.74	2225923	14.82	602925	17.10
023	SAMPLE	214846-002	1479800	10.81	2643433	11.74	2219182	14.82	643099	17.10
024	SAMPLE	214850-001	1460536	10.81	2646196	11.74	2223363	14.82	624455	17.10
025	SAMPLE	214850-002	1443304	10.81	2599314	11.74	2166147	14.82	617441	17.10
026	SAMPLE	214850-003	1431257	10.81	2579824	11.74	2159311	14.82	628643	17.10
027	SAMPLE	214850-004	1390945	10.82	2516509	11.74	2125898	14.82	623666	17.10
028	SAMPLE	214850-005	1370408	10.81	2496229	11.74	2075026	14.82	571800	17.10
029	SAMPLE	214850-007	1364380	10.81	2450761	11.74	2057537	14.82	614715	17.10
030	SAMPLE	214850-008	1349570	10.81	2433732	11.74	2056869	14.82	584289	17.10
031	SAMPLE	214850-009	1286875	10.81	2337019	11.74	1964124	14.82	556855	17.10
032	SAMPLE	214850-010	1308540	10.81	2376141	11.74	2004063	14.82	588911	17.10
033	SAMPLE	214850-011	1292398	10.82	2344962	11.74	1986998	14.82	557910	17.10
034	SAMPLE	214850-012	1301082	10.81	2360769	11.74	2003780	14.82	583821	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 459372161

Instrument : MSVOA06 Begun : 09/15/09 10:41
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	fif01	X	IB			09/15/09 10:41	1.0	1	
002	fif02	TUN	BFB			09/15/09 11:21	1.0	2	
003	fif03	CCV	30PPB			09/15/09 11:50	1.0	3 4 5 6 1	
004	fif04	BS	QC511997	Water	154898	09/15/09 12:49	1.0	7 8 9 10 1	
005	fif05	BSD	QC511998	Water	154898	09/15/09 13:24	1.0	7 8 9 10 1	
006	fif06	X	IB			09/15/09 13:58	1.0	1	
007	fif07	BLANK	QC511996	Water	154898	09/15/09 14:32	1.0	1	
008	fif08	TUN	BFB			09/15/09 15:03	1.0	2	
009	fif09	TUN	BFB			09/15/09 15:23	1.0	2	
010	fif10	TUN	BFB			09/15/09 15:35	1.0	2	
011	fif11	X	IB			09/15/09 16:05	1.0	1	
012	fif12	IB	CALIB			09/15/09 16:40	1.0	1	
013	fif13	ICAL				09/15/09 17:14	1.0	3 5 11 12 1	
014	fif14	ICAL				09/15/09 17:48	1.0	3 5 11 12 1	
015	fif15	ICAL				09/15/09 18:22	1.0	3 5 11 12 1	
016	fif16	ICAL				09/15/09 18:56	1.0	3 5 11 12 1	
017	fif17	ICAL				09/15/09 19:30	1.0	3 5 11 12 1	
018	fif18	ICAL				09/15/09 20:05	1.0	3 5 11 12 1	
019	fif19	ICAL				09/15/09 20:39	1.0	3 5 11 12 1	
020	fif20	ICAL				09/15/09 21:13	1.0	3 5 11 12 1	
021	fif21	ICAL				09/15/09 21:47	1.0	3 5 11 12 1	
022	fif22	X				09/15/09 22:22	1.0	13 1	
023	fif23	ICV				09/15/09 22:56	1.0	8 9 7 1	
024	fif24	X	IB			09/15/09 23:31	1.0	1	
025	fif25	X	IB			09/16/09 00:06	1.0	1	
026	fif26	X	IB			09/16/09 00:40	1.0	1	

MJD 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

Analyst: MJD Date: 09/16/09 Reviewer: LW Date: 09/17/09

Standards used: 1=S12892 2=S12404 3=S12733 4=S12217 5=S12773 6=S12685 7=S12693 8=S12589 9=S12845 10=S12833 11=S12565 12=S12634 13=S12922

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 459373649

Instrument : MSVOA06 Begun : 09/16/09 11:29
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	fig01	X	IB			09/16/09 11:29	1.0	1	
002	fig02	TUN	BFB			09/16/09 12:19	1.0	2	
003	fig03	ICV				09/16/09 12:51	1.0	3 1	
004	fig04	CCV	30PPB			09/16/09 13:53	1.0	4 5 6 7 1	
005	fig05	BS	QC512244	Water	154960	09/16/09 14:27	1.0	8 9 10 11 1	
006	fig06	BSD	QC512245	Water	154960	09/16/09 15:01	1.0	8 9 10 11 1	
007	fig07	X	IB			09/16/09 15:36	1.0	1	
008	fig08	BLANK	QC512243	Water	154960	09/16/09 16:10	1.0	1	
009	fig09	SAMPLE	214799-001	Water	154960	09/16/09 16:45	1.0	1	
010	fig10	SAMPLE	214799-004	Water	154960	09/16/09 17:19	1.0	1	pH > 2
011	fig11	SAMPLE	214799-006	Water	154960	09/16/09 17:54	1.0	1	pH > 2
012	fig12	SAMPLE	214928-002	Water	154960	09/16/09 18:28	1.0	1	
013	fig13	SAMPLE	214734-002	Water	154960	09/16/09 19:03	1.0	1	
014	fig14	SAMPLE	214734-003	Water	154960	09/16/09 19:37	1.0	1	
015	fig15	SAMPLE	214861-002	Water	154960	09/16/09 20:11	1.0	1	pH > 2
016	fig16	SAMPLE	214861-003	Water	154960	09/16/09 20:46	1.0	1	pH > 2
017	fig17	SAMPLE	214861-004	Water	154960	09/16/09 21:20	1.0	1	pH > 2
018	fig18	SAMPLE	214813-009	Water	154960	09/16/09 21:54	1.0	1	pH > 2
019	fig19	SAMPLE	214861-005	Water	154960	09/16/09 22:29	10.0	1	pH > 2
020	fig20	X	IB			09/16/09 23:03	1.0	1	
021	fig21	SAMPLE	214945-001	Water	154960	09/16/09 23:38	1.0	1	
022	fig22	SAMPLE	214903-001	Water	154960	09/17/09 00:12	1.0	1	
023	fig23	X	IB			09/17/09 00:47	1.0	1	
024	fig24	X	IB			09/17/09 01:21	1.0	1	
025	fig25	X	IB			09/17/09 01:56	1.0	1	

MJD 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 3.

MJD 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 4 through 22.

MJD 09/17/09 : Matrix spikes were not performed for this analysis in batch 154960 due to insufficient sample amount.

Analyst: MJD Date: 09/17/09 Reviewer: LW Date: 09/17/09

Standards used: 1=S12892 2=S12404 3=S12923 4=S12733 5=S12217 6=S12773 7=S12685 8=S12693 9=S12589 10=S12845 11=S12833

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 459376438

Instrument : MSVOA06 Begun : 09/18/09 09:58
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	fii01	X	IB			09/18/09 09:58	1.0	1	
002	fii02	TUN	BFB			09/18/09 10:33	1.0	2	
003	fii03	X	30PPB			09/18/09 11:05	1.0	3 4 5 6 1	
004	fii04	X	QC512617	Water	155052	09/18/09 11:39	1.0	7 8 9 10 1	
005	fii05	X	QC512618	Water	155052	09/18/09 12:14	1.0	7 8 9 10 1	
006	fii06	TUN	BFB			09/18/09 12:54	1.0	2	
007	fii07	CCV/BS	QC512617	Water	155052	09/18/09 13:31	1.0	7 8 9 10 1	
008	fii08	BSD	QC512618	Water	155052	09/18/09 14:06	1.0	7 8 9 10 1	
009	fii09	X	IB			09/18/09 14:41	1.0	1	
010	fii10	BLANK	QC512616	Water	155052	09/18/09 15:16	1.0	1	
011	fii11	SAMPLE	214907-016	Water	155052	09/18/09 16:16	1.0	1	
012	fii12	SAMPLE	214907-017	Water	155052	09/18/09 16:51	1.0	1	
013	fii13	SAMPLE	214804-008	Water	155052	09/18/09 17:25	1.0	1	
014	fii14	SAMPLE	214804-009	Water	155052	09/18/09 18:00	1.0	1	
015	fii15	SAMPLE	214804-010	Water	155052	09/18/09 18:34	1.0	1	
016	fii16	SAMPLE	214804-011	Water	155052	09/18/09 19:08	1.0	1	
017	fii17	MSS	214805-007	Water	155052	09/18/09 19:42	1.0	1	
018	fii18	SAMPLE	214805-009	Water	155052	09/18/09 20:17	1.0	1	
019	fii19	SAMPLE	214901-007	Water	155052	09/18/09 20:51	1.0	1	
020	fii20	SAMPLE	214901-009	Water	155052	09/18/09 21:25	1.0	1	
021	fii21	SAMPLE	214940-002	Water	155052	09/18/09 21:59	1.0	1	
022	fii22	SAMPLE	214901-008	Water	155052	09/18/09 22:33	4.0	1	1:TCE=160
023	fii23	SAMPLE	214901-010	Water	155052	09/18/09 23:08	20.0	1	1:TCE=120
024	fii24	MS	QC512687	Water	155052	09/18/09 23:42	1.0	7 8 9 10 1	
025	fii25	MSD	QC512688	Water	155052	09/19/09 00:17	1.0	7 8 9 10 1	
026	fii26	X	IB			09/19/09 00:51	1.0	1	
027	fii27	X	IB			09/19/09 01:25	1.0	1	
028	fii28	X	IB			09/19/09 02:00	1.0	1	
029	fii29	X	IB			09/19/09 02:34	1.0	1	
030	fii30	X	IB			09/19/09 03:08	1.0	1	

MJD 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

MJD 09/21/09 : Matrix spikes QC512687,QC512688 (batch 155052) were not reported because the parent sample was reanalyzed in another batch.

Analyst: MJD Date: 09/21/09 Reviewer: LW Date: 09/21/09

Standards used: 1=S12892 2=S12404 3=S12733 4=S12217 5=S12773 6=S12685 7=S12693 8=S12589 9=S12845 10=S12833

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839378097

Instrument : MSVOA11 Begun : 09/19/09 13:37
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kij01	X	IB			09/19/09 13:37	1.0	1
002	kij02	TUN	BFB			09/19/09 14:43	1.0	2
003	kij03	CCV/BS	QC512765	Water	155093	09/19/09 15:06	1.0	3 4 5 6 1
004	kij04	BSD	QC512766	Water	155093	09/19/09 15:34	1.0	3 4 5 6 1
005	kij05	X	IB			09/19/09 16:03	1.0	1
006	kij06	BLANK	QC512764	Water	155093	09/19/09 16:31	1.0	1
007	kij07	SAMPLE	214803-001	Water	155093	09/19/09 16:59	1.0	1
008	kij08	SAMPLE	214804-001	Water	155093	09/19/09 17:28	1.0	1
009	kij09	SAMPLE	214804-002	Water	155093	09/19/09 17:56	1.0	1
010	kij10	SAMPLE	214804-003	Water	155093	09/19/09 18:24	1.0	1
011	kij11	SAMPLE	214804-004	Water	155093	09/19/09 18:52	1.0	1
012	kij12	SAMPLE	214804-005	Water	155093	09/19/09 19:21	1.0	1
013	kij13	SAMPLE	214804-006	Water	155093	09/19/09 19:49	1.0	1
014	kij14	SAMPLE	214804-007	Water	155093	09/19/09 20:17	1.0	1
015	kij15	SAMPLE	214803-002	Water	155093	09/19/09 20:46	1.0	1
016	kij16	SAMPLE	214803-003	Water	155093	09/19/09 21:14	1.0	1
017	kij17	MSS	214803-005	Water	155093	09/19/09 21:42	1.0	1
018	kij18	SAMPLE	214803-006	Water	155093	09/19/09 22:10	1.0	1
019	kij19	SAMPLE	214803-007	Water	155093	09/19/09 22:39	1.0	1
020	kij20	SAMPLE	214803-008	Water	155093	09/19/09 23:07	1.0	1
021	kij21	SAMPLE	214803-009	Water	155093	09/19/09 23:35	1.0	1
022	kij22	SAMPLE	214803-010	Water	155093	09/20/09 00:04	1.0	1
023	kij23	SAMPLE	214803-004	Water	155093	09/20/09 00:32	2.500	1
024	kij24	MS	QC512786	Water	155093	09/20/09 01:00	1.0	4 5 6 1 3
025	kij25	MSD	QC512787	Water	155093	09/20/09 01:28	1.0	4 5 6 1 3
026	kij26	X	IB			09/20/09 01:57	1.0	1

BO 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 26.

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/21/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839382075

Instrument : MSVOA11 Begun : 09/22/09 07:55
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kim01	X	IB			09/22/09 07:55	1.0	1	
002	kim02	X	BFB			09/22/09 08:22	1.0	2	
003	kim03	X	QC513025	Water	155153	09/22/09 08:36	1.0	3 4 5 6 1	
004	kim04	X	BFB			09/22/09 09:14	1.0	2	
005	kim05	X	BFB			09/22/09 09:25	1.0	2	
006	kim06	X	25PPB			09/22/09 09:38	1.0	7 8 9 10 1	
007	kim07	X	QC513025	Water	155153	09/22/09 10:15	1.0	3 4 5 6 1	
008	kim08	X	IB			09/22/09 10:43	1.0	1	
009	kim09	TUN	BFB			09/22/09 11:11	1.0	2	
010	kim10	CCV/LCS	QC513025	Water	155153	09/22/09 11:24	1.0	11 4 5 6 1	
011	kim11	X	IB			09/22/09 11:53	1.0	1	
012	kim12	BLANK	QC513026	Water	155153	09/22/09 12:21	1.0	1	
013	kim13	MSS	214805-007	Water	155153	09/22/09 12:49	1.0	1	
014	kim14	SAMPLE	214805-009	Water	155153	09/22/09 13:18	1.0	1	
015	kim15	SAMPLE	214804-009	Water	155153	09/22/09 13:46	1.0	1	
016	kim16	SAMPLE	214804-011	Water	155153	09/22/09 14:14	1.0	1	
017	kim17	MS	QC513027	Water	155153	09/22/09 14:43	1.0	1 11 4 5 6	
018	kim18	MSD	QC513028	Water	155153	09/22/09 15:11	1.0	1 11 4 5 6	
019	kim19	X	IB			09/22/09 15:39	1.0	1	
020	kim20	SAMPLE	214846-004	Water	155153	09/22/09 16:08	1.0	1	
021	kim21	SAMPLE	214846-011	Water	155153	09/22/09 16:36	1.0	1	
022	kim22	SAMPLE	214846-001	Water	155153	09/22/09 17:04	1.0	1	
023	kim23	SAMPLE	214846-002	Water	155153	09/22/09 17:32	1.0	1	
024	kim24	SAMPLE	214850-001	Water	155153	09/22/09 18:01	1.0	1	
025	kim25	SAMPLE	214850-002	Water	155153	09/22/09 18:29	1.0	1	
026	kim26	SAMPLE	214850-003	Water	155153	09/22/09 18:57	1.0	1	
027	kim27	SAMPLE	214850-004	Water	155153	09/22/09 19:26	1.0	1	
028	kim28	SAMPLE	214850-005	Water	155153	09/22/09 19:54	1.0	1	
029	kim29	SAMPLE	214850-007	Water	155153	09/22/09 20:22	1.0	1	
030	kim30	SAMPLE	214850-008	Water	155153	09/22/09 20:50	1.0	1	
031	kim31	SAMPLE	214850-009	Water	155153	09/22/09 21:19	1.0	1	
032	kim32	SAMPLE	214850-010	Water	155153	09/22/09 21:47	1.0	1	
033	kim33	SAMPLE	214850-011	Water	155153	09/22/09 22:15	1.0	1	
034	kim34	SAMPLE	214850-012	Water	155153	09/22/09 22:44	2.0	1	
035	kim35	X	IB			09/22/09 23:12	1.0	1	
036	kim36	X	IB			09/22/09 23:40	1.0	1	
037	kim37	X	IB			09/23/09 00:08	1.0	1	
038	kim38	X	IB			09/23/09 00:37	1.0	1	
039	kim39	X	IB			09/23/09 01:05	1.0	1	

BO 09/22/09 : KIM10, used new alliquot of standard

BO 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923 7=S12733 8=S12773 9=S12217 10=S12634 11=S12996

Page 1 of 1

GC/MS VOLATILE ORGANICS

Batch #: 155052

Water Sample Prep Sheet

		Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
30	1	214805-9	C	<2				6	1x	MDD 9/18/09
	2	-7	C	↓					MSS	
	3	-7	DEF	<2					MS/MSD	
3	4	214907-16	B	<2					1x	
	5	-17							1x	
4	6	214901-7	B	↓					1x	
	7	8		<2					4x	
	8	9		<2					1x	
	9	10		<2					20x	
20	10	214804-8	B	<2					1x	
	11	9								
	12	10								
	13	11								
	14	214940-2	B	↓					1x	
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									
	25									
	26									
	27									
	28									
	29									
	30									
	31									
	32									
	33									
	34									
	35									

GC/MS VOLATILE ORGANICS

Batch #: 155093

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214803-001	A	<2				11	1x	SD 9/19/09
2	-002								
3	-003								
4	-004		<2					2.5x	
5	-005		<2					1x	
6	-006								
7	-007								
8	-008								
9	-009								
10	-010								
11	214804-001								
12	-002								
13	-003								
14	-004								
15	-005								
16	-006								
17	-007								
18	214803-005	DCD	<2					ms/msD 1x	
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155153

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214846-4	B	<2		1		11	mm 1x, 5mm ↑	
2	-11	C						mm 1x, 1+C co	
3	-1	A						TB	
4	-2							1x	
5	214850-1	A	<2		3				
6	-2								
7	-3								
8	-4								
9	-5								
10	-6							MSS PUT OFF	
11	-6							MS/MSD	
12	-7	A	<2						
13	-8								
14	-9								
15	-10								
16	-11								
17	-12					3		2x ~~PUT OFF~~	
18	-13							1x PUT OFF	
19	-14							1x	
20	-15							2x	
21	-16							1x PUT OFF	
22	214805-9	A	<2					mm 1x, 12DCA ↑, hold 9/22	
23	214804-9	A						mm 1x, 12DCA↑, hold 9/22	
24	214805-7	A						MSS 1x	
25	214805-7	BHI						MS/MSD 1x	
26	214804-11	A						mm 1x, 12DCA↑ hold 9/22	
27									
28									
29									
30									
31									
32									
33									
34									
35									

Laboratory Job Number 214804

ANALYTICAL REPORT

Metals

Matrix: Water

Curtis & Tompkins, Ltd.

Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Batch#:	154935
Field ID:	BC-10A-9C1	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Prepared:	09/15/09
Diln Fac:	5.000	Analyzed:	09/16/09

Type	Lab ID	Result	RL	ADEQ Flags
SAMPLE	214804-005	160	1.0	
BLANK	QC512147	ND	1.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Batch#:	154935
Field ID:	ZZZZZZZZZZ	Sampled:	09/09/09
MSS Lab ID:	214799-003	Received:	09/11/09
Matrix:	Water	Prepared:	09/15/09
Units:	ug/L	Analyzed:	09/16/09
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC512148		100.0	97.85	98	90-120			
BSD	QC512149		100.0	96.05	96	90-120	2	20	
MS	QC512150	0.3050	100.0	96.35	96	73-135			
MSD	QC512151		100.0	94.25	94	73-135	2	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	154935
MSS Lab ID:	214799-003	Sampled:	09/09/09
Lab ID:	QC512152	Received:	09/11/09
Matrix:	Water	Analyzed:	09/16/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
0.3050	1.000	ND	3.000	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Post Digest Spike	Batch#:	154935
MSS Lab ID:	214799-003	Sampled:	09/09/09
Lab ID:	QC512153	Received:	09/11/09
Matrix:	Water	Analyzed:	09/16/09

MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
0.3050	500.0	449.7	90	75-125	

REPORTING SUMMARY FOR 214804 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CR	
214804-005	MET16	09/16/09 19:36	5.0	+	
QC512147	MET16	09/16/09 15:31	5.0	+	
QC512148	MET16	09/16/09 17:08	5.0	+	
QC512149	MET16	09/16/09 17:20	5.0	+	
QC512150	MET16	09/16/09 17:54	5.0	+	
QC512151	MET16	09/16/09 18:05	5.0	+	
QC512152	MET16	09/16/09 17:42	25.0	+	
QC512153	MET16	09/16/09 18:16	5.0	+	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899373591

Instrument : MET16 Begun : 09/16/09 10:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i16k00001	TUN				09/16/09 10:31	1.0	1	
002	09i16k00002	X	RINSE			09/16/09 10:37	1.0	2	
003	09i16k00003	ICALBLK	CALBLANK			09/16/09 10:49	1.0	2	
004	09i16k00004	ICAL				09/16/09 11:00	1.0	3 2	
005	09i16k00005	ICAL				09/16/09 11:11	1.0	4 2	
006	09i16k00006	ICAL				09/16/09 11:23	1.0	5 2	
007	09i16k00007	ICAL				09/16/09 11:34	1.0	6 2	
008	09i16k00008	ICAL				09/16/09 11:45	1.0	7 2	
009	09i16k00009	ICAL				09/16/09 11:56	1.0	8 2	
010	09i16k00010	ICV				09/16/09 12:08	1.0	9 2	
011	09i16k00011	ICB				09/16/09 12:19	1.0	2	
012	09i16k00012	ICSA				09/16/09 12:28	1.0	10 2	7:CA=350000
013	09i16k00013	ICSAB				09/16/09 12:39	1.0	11 2	10:CA=330000
014	09i16k00014	X	RINSE			09/16/09 12:51	1.0	2	
015	09i16k00015	X	RINSE			09/16/09 13:03	1.0	2	
016	09i16k00016	BLANK	QC511922	Soil	154882	09/16/09 13:14	25.0	2	
017	09i16k00017	SER	QC511155	Soil	154680	09/16/09 13:26	125.0	2	
018	09i16k00018	BS	QC510930	Filtrate	154625	09/16/09 13:37	5.0	2	
019	09i16k00019	BSD	QC510931	Filtrate	154625	09/16/09 13:48	5.0	2	
020	09i16k00020	SAMPLE	214584-025	Soil	154932	09/16/09 14:00	25.0	2	1:MN=200
021	09i16k00021	SAMPLE	214584-025	Soil	154932	09/16/09 14:11	250.0	2	
022	09i16k00022	CCV				09/16/09 14:22	1.0	12 2	
023	09i16k00023	CCB				09/16/09 14:34	1.0	2	
024	09i16k00024	ICSA				09/16/09 14:45	1.0	10 2	7:CA=350000
025	09i16k00025	ICSAB				09/16/09 14:56	1.0	11 2	10:CA=330000
026	09i16k00026	X	RINSE			09/16/09 15:08	1.0	2	
027	09i16k00027	X	RINSE			09/16/09 15:19	1.0	2	
028	09i16k00028	BLANK	QC512147	Water	154935	09/16/09 15:31	5.0	2	
029	09i16k00029	MSS	214757-001	Soil	154932	09/16/09 15:39	250.0	2	
030	09i16k00030	SER	QC512131	Soil	154932	09/16/09 15:46	1250	2	
031	09i16k00031	PDS	QC512132	Soil	154932	09/16/09 15:54	250.0	13 14 2	
032	09i16k00032	CCV				09/16/09 16:04	1.0	12 2	
033	09i16k00033	CCB				09/16/09 16:14	1.0	2	
034	09i16k00034	ICSA				09/16/09 16:20	1.0	10 2	7:CA=350000
035	09i16k00035	ICSAB				09/16/09 16:28	1.0	11 2	10:CA=330000
036	09i16k00036	X	RINSE			09/16/09 16:34	1.0	2	
037	09i16k00037	X	RINSE			09/16/09 16:45	1.0	2	
038	09i16k00038	X	RINSE			09/16/09 16:57	1.0	2	
039	09i16k00039	BS	QC512148	Water	154935	09/16/09 17:08	5.0	2	
040	09i16k00040	BSD	QC512149	Water	154935	09/16/09 17:20	5.0	2	
041	09i16k00041	MSS	214799-003	Water	154935	09/16/09 17:31	5.0	2	1:NA=86000
042	09i16k00042	SER	QC512152	Water	154935	09/16/09 17:42	25.0	2	
043	09i16k00043	MS	QC512150	Water	154935	09/16/09 17:54	5.0	2	1:NA=93000
044	09i16k00044	MSD	QC512151	Water	154935	09/16/09 18:05	5.0	2	1:NA=91000
045	09i16k00045	PDS	QC512153	Water	154935	09/16/09 18:16	5.0	13 14 2	
046	09i16k00046	SAMPLE	214800-001	Water	154935	09/16/09 18:28	5.0	2	1:NA=77000
047	09i16k00047	CCV				09/16/09 18:39	1.0	12 2	
048	09i16k00048	CCB				09/16/09 18:50	1.0	2	
049	09i16k00049	X				09/16/09 19:02	1.0	2	
050	09i16k00050	SAMPLE	214801-001	Water	154935	09/16/09 19:13	5.0	2	1:NA=330000
051	09i16k00051	SAMPLE	214801-002	Water	154935	09/16/09 19:24	5.0	2	1:NA=88000
052	09i16k00052	SAMPLE	214804-005	Water	154935	09/16/09 19:36	5.0	2	1:NA=36000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899373591

Instrument : MET16 Begun : 09/16/09 10:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i16k00053	SAMPLE	214805-006	Water	154935	09/16/09 19:47	5.0	2	2:NA=26000
054	09i16k00054	CCV				09/16/09 19:59	1.0	12 2	
055	09i16k00055	CCB				09/16/09 20:10	1.0	2	
056	09i16k00056	X				09/16/09 20:21	1.0	2	
057	09i16k00057	ICSA				09/16/09 20:33	1.0	10 2	7:CA=350000
058	09i16k00058	ICSAB				09/16/09 20:44	1.0	11 2	10:CA=330000
059	09i16k00059	X	RINSE			09/16/09 20:56	1.0	2	
060	09i16k00060	X	RINSE			09/16/09 21:07	1.0	2	
061	09i16k00061	X	RINSE			09/16/09 21:18	1.0	2	

JYF 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 58.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899373591

Date : 09/16/09 Reference : 09i16k00003
Sequence : MET16 09i16k00 Analyzed : 09/16/09 10:49

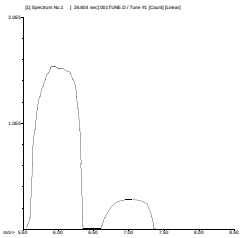
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1573174	1231106	24365	535503	118071	15688	1824394	2493311	1630607	3177227
		LOWER LIMIT	471952	369332	7310	160651	35421	4706	547318	747993	489182	953168
		UPPER LIMIT	1887809	1477327	29238	642604	141685	18826	2189273	2991973	1956728	3812672
011	ICB		1570344	1202664	24459	543553	120285	15955	1727093	2368326	1550813	3003007
012	ICSA		1331796	1112779	26495	534830	107903	15686	1520801	1926482	1482286	2850059
013	ICSAB		1345262	1143494	26353	522719	107574	15789	1580059	1983492	1524916	2941182
016	BLANK	QC511922	1526667	1181266	23903	498040	113560	15785	1802053	2503342	1592329	3127315
017	SER	QC511155	1498049	1178537	23723	499843	112292	15488	1741066	2435451	1581529	3081577
018	BS	QC510930	1501002	1187398	24336	505875	113846	15988	1752251	2436348	1569294	3088796
019	BSD	QC510931	1506798	1176845	24042	510246	114776	15863	1751330	2430396	1569635	3075823
020	SAMPLE	214584-025	1533229	1258807	23925	533619	114823	15276	1758920	2432721	1674278	3114296
021	SAMPLE	214584-025	1538053	1224295	25586	532806	119167	16479	1778695	2459943	1604905	3109050
022	CCV		1542466	1242225	26294	542005	118701	16451	1744599	2353000	1603500	3087926
023	CCB		1510284	1187080	24941	525315	118083	16395	1735798	2404750	1567413	3025996
024	ICSA		1317233	1135392	27090	519892	108022	16365	1552391	1980525	1517497	2914472
025	ICSAB		1343886	1161315	26869	502437	106343	16087	1613421	2038344	1580939	3024354
028	BLANK	QC512147	1461345	1149446	23348	463040	111337	16138	1798401	2529359	1590134	3135596
029	MSS	214757-001	1511255	1194814	24049	496131	113752	15968	1807247	2528054	1617008	3142113
030	SER	QC512131	1519913	1193752	24771	495933	113546	16420	1838506	2533408	1636281	3175790
031	PDS	QC512132	1508955	1217365	25086	502225	112045	16192	1755964	2388925	1617276	3153568
032	CCV		1516584	1216802	25705	509984	114592	16708	1745673	2359441	1598805	3089799
033	CCB		1539854	1210070	24640	501576	115153	16281	1802100	2470732	1615839	3108923
034	ICSA		1320435	1148090	26979	505602	106247	16351	1604049	2015924	1558875	2970965
035	ICSAB		1364068	1179487	26475	486274	104446	16103	1650314	2073105	1607587	3085712
039	BS	QC512148	1448139	1147726	23215	439194	106430	16124	1791885	2561873	1615124	3218689
040	BSD	QC512149	1450880	1144085	23111	445831	106775	15995	1797331	2536602	1601357	3196878
041	MSS	214799-003	1420096	1156225	23502	450386	108817	16279	1748015	2389530	1579366	3130319
042	SER	QC512152	1480062	1188179	23694	464258	109296	16176	1806988	2493071	1606755	3165524
043	MS	QC512150	1411469	1166359	23572	451210	107295	15918	1731275	2348964	1579942	3111444
044	MSD	QC512151	1434359	1159514	23765	451643	108259	16363	1728095	2341182	1576835	3079156
045	PDS	QC512153	1454211	1195555	24300	453569	106183	16371	1717973	2318909	1586484	3098942
046	SAMPLE	214800-001	1452933	1174349	24111	448311	108803	16487	1748264	2376118	1599353	3097982
047	CCV		1558371	1265265	25478	469117	106498	16603	1802631	2412406	1658651	3177406
048	CCB		1559018	1241060	24673	453789	105813	16365	1843795	2487549	1651656	3168161
050	SAMPLE	214801-001	1457794	1185818	25058	441969	102407	16286	1716937	2226037	1588612	3039843
051	SAMPLE	214801-002	1473548	1193994	24304	439977	105839	16701	1759363	2404067	1608013	3139334
052	SAMPLE	214804-005	1461411	1176395	24046	427335	102939	16516	1756894	2407428	1607447	3142662
053	SAMPLE	214805-006	1465001	1167996	24100	426252	102509	16591	1773525	2413523	1586982	3119894
054	CCV		1580629	1273316	26133	452231	102828	16848	1829838	2446816	1692000	3214482
055	CCB		1650456	1309635	25109	449123	103990	16822	1960185	2651692	1777690	3373128
057	ICSA		1373298	1195691	27642	442424	94130	16770	1681206	2086627	1635005	3097068
058	ICSAB		1387210	1209688	27346	423998	92248	16750	1713591	2148258	1694312	3193079

MET16 QC Tune Report

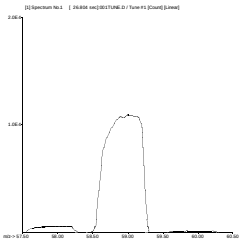
Data File: C:\ICPCHEM\1\DATA\09I16k00.B\001TUNE.D
Date Acquired: Sep 16 2009 10:31 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

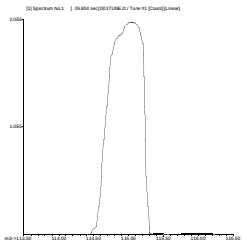
Element	Actual	Required	Flag
7 Li	0.85	5.00	
59 Co	0.92	5.00	
115 In	0.52	5.00	
205 Tl	0.30	5.00	



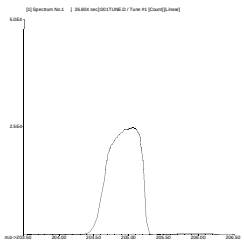
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214804 METALS Water: EPA 6020

Inst : MET16 Reviewer : ---
Calnum : 899373591001 Date : 16-SEP-2009 10:49
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i16k00004	899373591004		16-SEP-2009 11:00	S12854, S12847
L2	09i16k00005	899373591005		16-SEP-2009 11:11	S12855, S12847
L3	09i16k00006	899373591006		16-SEP-2009 11:23	S12856, S12847
L4	09i16k00007	899373591007		16-SEP-2009 11:34	S12857, S12847
L5	09i16k00008	899373591008		16-SEP-2009 11:45	S12852, S12847
L6	09i16k00009	899373591009		16-SEP-2009 11:56	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Chromium	E	0.1690	0.0704	0.0559	0.0425	0.0408	0.0403	BLNK	-0.2333	24.7883		0.0698	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Chromium	E	0.100	86	0.500	28	1.000	15	10.00	3	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214804 METALS Water
EPA 6020

Inst : MET16
Calnum : 899373591001 Cal Date : 16-SEP-2009

ICV 899373591010 (09i16k00010 16-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Chromium	E	100.0	102.9	ug/L	3	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591011 File : 09i16k00011 Time : 16-SEP-2009 12:19
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1570344	-0.18
Scandium	A	1231106	1202664	-2.31
Scandium	E	24365	24459	0.39
Scandium	H	535503	543553	1.50
Germanium	H	118071	120285	1.88
Germanium	E	15688	15955	1.70
Indium	A	1824394	1727093	-5.33
Bismuth	A	2493311	2368326	-5.01
Yttrium	A	1630607	1550813	-4.89
Terbium	A	3177227	3003007	-5.48

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591022 File : 09i16k00022 Time : 16-SEP-2009 14:22
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0698	0.0406	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1542466	-1.95
Scandium	A	1231106	1242225	0.90
Scandium	E	24365	26294	7.92
Scandium	H	535503	542005	1.21
Germanium	H	118071	118701	0.53
Germanium	E	15688	16451	4.86
Indium	A	1824394	1744599	-4.37
Bismuth	A	2493311	2353000	-5.63
Yttrium	A	1630607	1603500	-1.66
Terbium	A	3177227	3087926	-2.81

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591023 File : 09i16k00023 Time : 16-SEP-2009 14:34
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1510284	-4.00
Scandium	A	1231106	1187080	-3.58
Scandium	E	24365	24941	2.36
Scandium	H	535503	525315	-1.90
Germanium	H	118071	118083	0.01
Germanium	E	15688	16395	4.51
Indium	A	1824394	1735798	-4.86
Bismuth	A	2493311	2404750	-3.55
Yttrium	A	1630607	1567413	-3.88
Terbium	A	3177227	3025996	-4.76

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591024 File : 09i16k00024 Time : 16-SEP-2009 14:45
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Chromium	E	21.52	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	119700	ug/L	120
Calcium	A	300000	354400	ug/L	118
Magnesium	A	100000	115200	ug/L	115
Molybdenum	A	2000	2510	ug/L	126
Potassium	A	100000	118900	ug/L	119
Sodium	E	250000	285100	ug/L	114
Iron	H	250000	285600	ug/L	114

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1317233	-16.27
Scandium	A	1231106	1135392	-7.77
Scandium	E	24365	27090	11.18
Scandium	H	535503	519892	-2.92
Germanium	H	118071	108022	-8.51
Germanium	E	15688	16365	4.32
Indium	A	1824394	1552391	-14.91
Bismuth	A	2493311	1980525	-20.57
Yttrium	A	1630607	1517497	-6.94
Terbium	A	3177227	2914472	-8.27

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591025 File : 09i16k00025 Time : 16-SEP-2009 14:56
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	200.0	209.3	ug/L	5	20	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	535503	502437	-6.17
Scandium	A	1231106	1161315	-5.67
Scandium	E	24365	26869	10.28
Germanium	H	118071	106343	-9.93
Germanium	E	15688	16087	2.54
Indium	A	1824394	1613421	-11.56
Yttrium	A	1630607	1580939	-3.05

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591032 File : 09i16k00032 Time : 16-SEP-2009 16:04
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0698	0.0407	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1516584	-3.60
Scandium	A	1231106	1216802	-1.16
Scandium	E	24365	25705	5.50
Scandium	H	535503	509984	-4.77
Germanium	H	118071	114592	-2.95
Germanium	E	15688	16708	6.50
Indium	A	1824394	1745673	-4.31
Bismuth	A	2493311	2359441	-5.37
Yttrium	A	1630607	1598805	-1.95
Terbium	A	3177227	3089799	-2.75

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591033 File : 09i16k00033 Time : 16-SEP-2009 16:14
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1539854	-2.12
Scandium	A	1231106	1210070	-1.71
Scandium	E	24365	24640	1.13
Scandium	H	535503	501576	-6.34
Germanium	H	118071	115153	-2.47
Germanium	E	15688	16281	3.78
Indium	A	1824394	1802100	-1.22
Bismuth	A	2493311	2470732	-0.91
Yttrium	A	1630607	1615839	-0.91
Terbium	A	3177227	3108923	-2.15

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591034 File : 09i16k00034 Time : 16-SEP-2009 16:20
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Chromium	E	21.25	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	118000	ug/L	118
Calcium	A	300000	353000	ug/L	118
Magnesium	A	100000	113200	ug/L	113
Molybdenum	A	2000	2492	ug/L	125
Potassium	A	100000	119200	ug/L	119
Sodium	E	250000	277000	ug/L	111
Iron	H	250000	286600	ug/L	115

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1320435	-16.07
Scandium	A	1231106	1148090	-6.74
Scandium	E	24365	26979	10.73
Scandium	H	535503	505602	-5.58
Germanium	H	118071	106247	-10.01
Germanium	E	15688	16351	4.23
Indium	A	1824394	1604049	-12.08
Bismuth	A	2493311	2015924	-19.15
Yttrium	A	1630607	1558875	-4.40
Terbium	A	3177227	2970965	-6.49

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591035 File : 09i16k00035 Time : 16-SEP-2009 16:28
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	200.0	208.2	ug/L	4	20	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	535503	486274	-9.19
Scandium	A	1231106	1179487	-4.19
Scandium	E	24365	26475	8.66
Germanium	H	118071	104446	-11.54
Germanium	E	15688	16103	2.65
Indium	A	1824394	1650314	-9.54
Yttrium	A	1630607	1607587	-1.41

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591047 File : 09i16k00047 Time : 16-SEP-2009 18:39
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0698	0.0399	100.0	98.76	ug/L	-1	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1558371	-0.94
Scandium	A	1231106	1265265	2.77
Scandium	E	24365	25478	4.57
Scandium	H	535503	469117	-12.40
Germanium	H	118071	106498	-9.80
Germanium	E	15688	16603	5.83
Indium	A	1824394	1802631	-1.19
Bismuth	A	2493311	2412406	-3.24
Yttrium	A	1630607	1658651	1.72
Terbium	A	3177227	3177406	0.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591048 File : 09i16k00048 Time : 16-SEP-2009 18:50
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1559018	-0.90
Scandium	A	1231106	1241060	0.81
Scandium	E	24365	24673	1.26
Scandium	H	535503	453789	-15.26
Germanium	H	118071	105813	-10.38
Germanium	E	15688	16365	4.32
Indium	A	1824394	1843795	1.06
Bismuth	A	2493311	2487549	-0.23
Yttrium	A	1630607	1651656	1.29
Terbium	A	3177227	3168161	-0.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591054 File : 09i16k00054 Time : 16-SEP-2009 19:59
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0698	0.0392	100.0	96.98	ug/L	-3	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1580629	0.47
Scandium	A	1231106	1273316	3.43
Scandium	E	24365	26133	7.26
Scandium	H	535503	452231	-15.55
Germanium	H	118071	102828	-12.91
Germanium	E	15688	16848	7.39
Indium	A	1824394	1829838	0.30
Bismuth	A	2493311	2446816	-1.86
Yttrium	A	1630607	1692000	3.77
Terbium	A	3177227	3214482	1.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591055 File : 09i16k00055 Time : 16-SEP-2009 20:10
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1650456	4.91
Scandium	A	1231106	1309635	6.38
Scandium	E	24365	25109	3.05
Scandium	H	535503	449123	-16.13
Germanium	H	118071	103990	-11.93
Germanium	E	15688	16822	7.23
Indium	A	1824394	1960185	7.44
Bismuth	A	2493311	2651692	6.35
Yttrium	A	1630607	1777690	9.02
Terbium	A	3177227	3373128	6.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591057 File : 09i16k00057 Time : 16-SEP-2009 20:33
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Chromium	E	21.44	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116700	ug/L	117
Calcium	A	300000	354300	ug/L	118
Magnesium	A	100000	111500	ug/L	112
Molybdenum	A	2000	2467	ug/L	123
Potassium	A	100000	119900	ug/L	120
Sodium	E	250000	275600	ug/L	110
Iron	H	250000	293000	ug/L	117

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1373298	-12.71
Scandium	A	1231106	1195691	-2.88
Scandium	E	24365	27642	13.45
Scandium	H	535503	442424	-17.38
Germanium	H	118071	94130	-20.28
Germanium	E	15688	16770	6.90
Indium	A	1824394	1681206	-7.85
Bismuth	A	2493311	2086627	-16.31
Yttrium	A	1630607	1635005	0.27
Terbium	A	3177227	3097068	-2.52

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214804 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591058 File : 09i16k00058 Time : 16-SEP-2009 20:44
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	200.0	204.9	ug/L	2	20	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	535503	423998	-20.82
Scandium	A	1231106	1209688	-1.74
Scandium	E	24365	27346	12.23
Germanium	H	118071	92248	-21.87
Germanium	E	15688	16750	6.77
Indium	A	1824394	1713591	-6.07
Yttrium	A	1630607	1694312	3.91

SAMPLE PREPARATION SUMMARY

Batch # : 154935
Started By : MCB
Method : 200.8
Spike #1 ID : S12256

Prep Date : 15-SEP-2009 19:30
Spike #2 ID : S12257

Analysis : ICAP
Finished By : MCB
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214799-003		Water	50	50	1	1.0						CD, PB	
214800-001		Water	50	50	1	1.0						CD, PB	
214801-001		Water	50	50	1	1.0						CD, PB	
214801-002		Water	50	50	1	1.0						CD, PB	
214804-005		Water	50	50	1	1.0						CR	
214805-006		Water	50	50	1	1.0						NI	
QC512147	BLANK	Water	50	50	1	1.0							
QC512148	BS	Water	50	50	1	1.0		.25	.25				
QC512149	BSD	Water	50	50	1	1.0		.25	.25				
QC512150	MS	Water	50	50	1	1.0		.25	.25				
QC512151	MSD	Water	50	50	1	1.0		.25	.25				
QC512152	SER	Water	50	50	1	1.0							
QC512153	PDS	Water	50	50	1	1.0							

Reviewed by: JYF Date: 09/17/09

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 154985
Digested by: MCB111
Date Digested: 9/15/09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK		50	50	N	
BS		↓	↓	↓	
BSD					
MS-799-003	A				
MSD-799-003	↓				
214799-003					
214800-001					
214801-001					
↓ -002	↓				
214804-005	D				
214805-006	↓	↓	↓	↓	

JWF 9/17/09

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J79714-261	
0.25 ~~.5~~ mL of spike solution (Std1) was added to all spikes	S12256	MCB 111 9/15/09
0.25 ~~.5~~ mL of spike solution (Std2) was added to all spikes	S12257	↓
digestion temperature (90-95 degrees C)	95°C	
digestion begun at (time)	7:30p	
concentrated HCl	H19031 JTBAKER	
concentrated HNO3	H12022 ↓	
digestion ended at (time)	11:30pm	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group	ICP	↓

Michael C Brooks 9/15/09
Prep Chemist / Date

Continued from page ____
Continued on page ____

JJ 9/17/09
Reviewed by / Date

Laboratory Job Number 214804

ANALYTICAL REPORT

Metals

Matrix: Filtrate

Curtis & Tompkins, Ltd.

Dissolved Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Batch#:	155041
Field ID:	BC-10A-9C1	Sampled:	09/08/09
Matrix:	Filtrate	Received:	09/10/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/21/09

Type	Lab ID	Result	RL	ADEQ Flags
SAMPLE	214804-005	2.0	1.0	D1
BLANK	QC512579	ND	1.0	D1

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Dissolved Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Diln Fac:	5.000
Field ID:	ZZZZZZZZZZ	Batch#:	155041
Matrix:	Filtrate	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/21/09

Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Sampled	Received	ADEQ Flags
BS		QC512580		100.0	100.6	101	90-120					D1
BSD		QC512581		100.0	98.50	99	90-120	2	20			D1
MS	214920-002	QC512582	0.6685	100.0	96.80	96	73-135			09/15/09	09/16/09	D1
MSD	214920-002	QC512583		100.0	94.90	94	73-135	2	20	09/15/09	09/16/09	D1
MS	214955-003	QC512586	<0.2000	100.0	94.95	95	73-135			09/16/09	09/17/09	D1
MSD	214955-003	QC512587		100.0	108.2	108	73-135	13	20	09/16/09	09/17/09	D1

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	155041
MSS Lab ID:	214920-002	Sampled:	09/15/09
Lab ID:	QC512584	Received:	09/16/09
Matrix:	Filtrate	Analyzed:	09/21/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
0.6685	1.000	ND	3.000	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Chromium

Lab #:	214804	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Chromium	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Post Digest Spike	Batch#:	155041
MSS Lab ID:	214920-002	Sampled:	09/15/09
Lab ID:	QC512585	Received:	09/16/09
Matrix:	Filtrate	Analyzed:	09/21/09

MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
0.6685	500.0	465.5	93	75-125	D2

REPORTING SUMMARY FOR 214804 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CR	
214804-005	MET16	09/21/09 22:53	5.0	+	
QC512579	MET16	09/21/09 20:10	5.0	+	
QC512580	MET16	09/21/09 20:21	5.0	+	
QC512581	MET16	09/21/09 20:32	5.0	+	
QC512582	MET16	09/21/09 21:04	5.0	+	
QC512583	MET16	09/21/09 21:15	5.0	+	
QC512584	MET16	09/21/09 20:53	25.0	+	
QC512585	MET16	09/21/09 21:26	5.0	+	
QC512586	MET16	09/21/09 22:20	5.0	+	
QC512587	MET16	09/21/09 22:31	5.0	+	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899380941

Instrument : MET16 Begun : 09/21/09 13:01
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i21m00001	TUN				09/21/09 13:01	1.0	1	
002	09i21m00002	X	RINSE			09/21/09 13:07	1.0	2	
003	09i21m00003	ICALBLK	CALBLANK			09/21/09 13:18	1.0	2	
004	09i21m00004	ICAL				09/21/09 13:28	1.0	3 2	
005	09i21m00005	ICAL				09/21/09 13:39	1.0	4 2	
006	09i21m00006	ICAL				09/21/09 13:50	1.0	5 2	
007	09i21m00007	ICAL				09/21/09 14:01	1.0	6 2	
008	09i21m00008	ICAL				09/21/09 14:12	1.0	7 2	
009	09i21m00009	ICAL				09/21/09 14:23	1.0	8 2	
010	09i21m00010	ICV				09/21/09 14:33	1.0	9 2	
011	09i21m00011	ICB				09/21/09 14:45	1.0	2	
012	09i21m00012	ICSA				09/21/09 14:55	1.0	10 2	7:CA=330000
013	09i21m00013	ICSAB				09/21/09 15:06	1.0	11 2	11:CA=320000
014	09i21m00014	X	RINSE			09/21/09 15:17	1.0	2	
015	09i21m00015	X	RINSE			09/21/09 15:28	1.0	2	
016	09i21m00016	BLANK	QC512723	Filtrate	155082	09/21/09 15:39	5.0	2	
017	09i21m00017	BS	QC512724	Filtrate	155082	09/21/09 15:50	5.0	2	
018	09i21m00018	BSD	QC512725	Filtrate	155082	09/21/09 16:00	5.0	2	
019	09i21m00019	MSS	214982-007	Filtrate	155082	09/21/09 16:11	5.0	2	
020	09i21m00020	SER	QC512728	Filtrate	155082	09/21/09 16:22	25.0	2	
021	09i21m00021	MS	QC512726	Filtrate	155082	09/21/09 16:33	5.0	2	
022	09i21m00022	MSD	QC512727	Filtrate	155082	09/21/09 16:44	5.0	2	
023	09i21m00023	PDS	QC512729	Filtrate	155082	09/21/09 16:55	5.0	12 13 2	
024	09i21m00024	CCV				09/21/09 17:05	1.0	14 2	
025	09i21m00025	CCB				09/21/09 17:16	1.0	2	
026	09i21m00026	X				09/21/09 17:27	1.0	2	
027	09i21m00027	SAMPLE	214982-001	Filtrate	155082	09/21/09 17:38	5.0	2	
028	09i21m00028	SAMPLE	214982-002	Filtrate	155082	09/21/09 17:49	5.0	2	
029	09i21m00029	SAMPLE	214982-003	Filtrate	155082	09/21/09 17:59	5.0	2	
030	09i21m00030	SAMPLE	214982-004	Filtrate	155082	09/21/09 18:10	5.0	2	
031	09i21m00031	SAMPLE	214982-005	Filtrate	155082	09/21/09 18:21	5.0	2	
032	09i21m00032	SAMPLE	214982-006	Filtrate	155082	09/21/09 18:32	5.0	2	
033	09i21m00033	SAMPLE	214982-008	Filtrate	155082	09/21/09 18:43	5.0	2	
034	09i21m00034	SAMPLE	214982-009	Filtrate	155082	09/21/09 18:54	5.0	2	
035	09i21m00035	CCV				09/21/09 19:05	1.0	14 2	
036	09i21m00036	CCB				09/21/09 19:15	1.0	2	
037	09i21m00037	ICSA				09/21/09 19:26	1.0	10 2	7:CA=330000
038	09i21m00038	ICSAB				09/21/09 19:37	1.0	11 2	11:CA=320000
039	09i21m00039	X	RINSE			09/21/09 19:48	1.0	2	
040	09i21m00040	X	RINSE			09/21/09 19:59	1.0	2	
041	09i21m00041	BLANK	QC512579	Filtrate	155041	09/21/09 20:10	5.0	2	
042	09i21m00042	BS	QC512580	Filtrate	155041	09/21/09 20:21	5.0	2	
043	09i21m00043	BSD	QC512581	Filtrate	155041	09/21/09 20:32	5.0	2	
044	09i21m00044	MSS	214920-002	Filtrate	155041	09/21/09 20:42	5.0	2	1:NA=110000
045	09i21m00045	SER	QC512584	Filtrate	155041	09/21/09 20:53	25.0	2	
046	09i21m00046	MS	QC512582	Filtrate	155041	09/21/09 21:04	5.0	2	
047	09i21m00047	MSD	QC512583	Filtrate	155041	09/21/09 21:15	5.0	2	
048	09i21m00048	PDS	QC512585	Filtrate	155041	09/21/09 21:26	5.0	12 13 2	
049	09i21m00049	CCV				09/21/09 21:37	1.0	14 2	
050	09i21m00050	CCB				09/21/09 21:47	1.0	2	
051	09i21m00051	X				09/21/09 21:58	1.0	2	
052	09i21m00052	MSS	214955-003	Filtrate	155041	09/21/09 22:09	5.0	2	1:NA=110000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899380941

Instrument : MET16 Begun : 09/21/09 13:01
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i21m00053	MS	QC512586	Filtrate	155041	09/21/09 22:20	5.0	2	
054	09i21m00054	MSD	QC512587	Filtrate	155041	09/21/09 22:31	5.0	2	1:NA=130000
055	09i21m00055	SAMPLE	214784-001	Filtrate	155041	09/21/09 22:42	5.0	2	1:NA=71000
056	09i21m00056	SAMPLE	214804-005	Filtrate	155041	09/21/09 22:53	5.0	2	1:NA=36000
057	09i21m00057	SAMPLE	214811-003	Filtrate	155041	09/21/09 23:03	5.0	2	3:NA=54000
058	09i21m00058	TUN				09/21/09 23:15	1.0	1	
059	09i21m00059	X	RINSE			09/21/09 23:21	1.0	2	
060	09i21m00060	SAMPLE	214811-004	Filtrate	155041	09/21/09 23:32	5.0	2	3:NA=54000
061	09i21m00061	SAMPLE	214811-007	Filtrate	155041	09/21/09 23:43	5.0	2	
062	09i21m00062	SAMPLE	214811-008	Filtrate	155041	09/21/09 23:54	5.0	2	
063	09i21m00063	SAMPLE	214819-001	Filtrate	155041	09/22/09 00:05	5.0	2	1:NA=51000
064	09i21m00064	CCV				09/22/09 00:15	1.0	14 2	
065	09i21m00065	CCB				09/22/09 00:26	1.0	2	
066	09i21m00066	X				09/22/09 00:37	1.0	2	
067	09i21m00067	SAMPLE	214819-002	Filtrate	155041	09/22/09 00:48	5.0	2	1:NA=79000
068	09i21m00068	SAMPLE	214871-001	Filtrate	155041	09/22/09 00:59	5.0	2	1:NA=67000
069	09i21m00069	SAMPLE	214920-001	Filtrate	155041	09/22/09 01:10	5.0	2	1:NA=140000
070	09i21m00070	SAMPLE	214955-001	Filtrate	155041	09/22/09 01:21	5.0	2	1:NA=61000
071	09i21m00071	SAMPLE	214955-002	Filtrate	155041	09/22/09 01:32	5.0	2	
072	09i21m00072	SAMPLE	214955-005	Filtrate	155041	09/22/09 01:43	5.0	2	1:NA=60000
073	09i21m00073	CCV				09/22/09 01:53	1.0	14 2	
074	09i21m00074	CCB				09/22/09 02:04	1.0	2	
075	09i21m00075	X				09/22/09 02:15	1.0	2	
076	09i21m00076	ICSA				09/22/09 02:26	1.0	10 2	7:CA=330000
077	09i21m00077	ICSAB				09/22/09 02:37	1.0	11 2	13:CA=320000
078	09i21m00078	X	RINSE			09/22/09 02:48	1.0	2	
079	09i21m00079	X	RINSE			09/22/09 02:58	1.0	2	
080	09i21m00080	X	RINSE			09/22/09 03:09	1.0	2	

JYF 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 77.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S10997 13=S10998 14=S12851

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899380941

Date : 09/21/09 Reference : 09i21m00003
Sequence : MET16 09i21m00 Analyzed : 09/21/09 13:18

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1358549	762309	39617	292670	72460	22278	1290075	1934128	1133206	2330595
		LOWER LIMIT	407565	228693	11885	87801	21738	6683	387023	580238	339962	699179
		UPPER LIMIT	1630259	914771	47540	351204	86952	26734	1548090	2320954	1359847	2796714
011	ICB		1403683	772585	39284	265384	65379	21762	1282935	1890184	1137423	2314630
012	ICSA		1324943	775810	41327	270885	61591	21435	1140102	1506404	1122642	2186096
013	ICSAB		1280477	755727	38484	239412	54709	19918	1136114	1499426	1112719	2178171
016	BLANK	QC512723	1311870	746348	34823	206743	50904	19268	1285480	1880251	1127815	2315101
017	BS	QC512724	1348274	758919	35324	211338	51351	19379	1275128	1856932	1141088	2311740
018	BSD	QC512725	1362729	769375	35475	208182	51027	19310	1285848	1852334	1135510	2342397
019	MSS	214982-007	1345606	761641	35278	216504	52923	19573	1278374	1855078	1132477	2324310
020	SER	QC512728	1347969	763531	35313	222608	54836	19469	1285838	1863752	1141215	2313886
021	MS	QC512726	1368110	773544	35724	223537	53959	19533	1281427	1829391	1138540	2311783
022	MSD	QC512727	1379593	780494	36009	223510	54270	19622	1269916	1817717	1149619	2314290
023	PDS	QC512729	1367468	781323	36273	222656	53401	19480	1251407	1770078	1154613	2311942
024	CCV		1352395	762798	35998	220582	53081	19329	1230732	1747942	1121727	2267985
025	CCB		1348784	765953	34744	220742	54129	19172	1291195	1861453	1148543	2330184
027	SAMPLE	214982-001	1335711	760803	34714	220202	54074	19172	1264902	1846908	1119767	2288729
028	SAMPLE	214982-002	1330846	752795	34619	220241	54293	19133	1267014	1841411	1122126	2270068
029	SAMPLE	214982-003	1319357	743373	34753	222528	54238	19098	1245230	1807044	1104837	2245508
030	SAMPLE	214982-004	1327604	744471	34888	219580	53205	18943	1243895	1805628	1110107	2247119
031	SAMPLE	214982-005	1316641	751654	34067	212780	52476	18822	1254460	1831351	1111119	2265118
032	SAMPLE	214982-006	1341231	750588	34483	217644	53179	18883	1254908	1849292	1115459	2262804
033	SAMPLE	214982-008	1346370	759964	34755	213873	51589	19215	1264128	1823782	1124965	2268082
034	SAMPLE	214982-009	1331377	749369	34234	217596	53032	18640	1259353	1832646	1120331	2285212
035	CCV		1348914	757376	35253	209188	49867	18907	1231347	1747133	1122793	2276902
036	CCB		1284983	693896	33276	205811	50261	18357	1191541	1756664	1058454	2178024
037	ICSA		1201183	720930	35358	217326	49034	18423	1066552	1440320	1067915	2104185
038	ICSAB		1143633	692276	33875	194560	44741	17681	1044793	1432414	1064912	2095656
041	BLANK	QC512579	1173491	685445	30396	166174	41445	16916	1210230	1783270	1073945	2235228
042	BS	QC512580	1183596	703619	31259	168658	41585	17131	1223650	1779593	1082362	2243009
043	BSD	QC512581	1198855	711046	31438	174844	42887	17281	1229051	1788310	1086027	2240918
044	MSS	214920-002	1238187	747882	32625	184204	45212	17702	1222622	1696812	1122812	2233236
045	SER	QC512584	1212011	714426	31359	184358	45801	17411	1219774	1754763	1092477	2220889
046	MS	QC512582	1237913	751140	32593	184531	44756	17431	1220371	1675761	1122060	2229190
047	MSD	QC512583	1228340	743802	32281	185785	44723	17517	1204384	1662647	1115210	2217229
048	PDS	QC512585	1214694	736655	32455	180820	43699	17322	1180540	1626077	1096460	2191424
049	CCV		1172642	695866	30666	162760	38924	16840	1164512	1660004	1064807	2165130
050	CCB		1155560	676119	29900	163634	40897	16756	1186770	1723682	1044165	2160526
052	MSS	214955-003	1267229	753778	32788	194272	47227	17513	1211668	1642679	1114386	2215910
053	MS	QC512586	1262274	764046	32825	163509	39829	17922	1220477	1645738	1125417	2231191
054	MSD	QC512587	1271794	774967	33335	156845	38006	17770	1227110	1641673	1140221	2236400
055	SAMPLE	214784-001	1268190	767750	32650	145654	35744	17842	1254356	1734575	1141322	2284339
056	SAMPLE	214804-005	1261946	751184	32468	136864	34158	18051	1252468	1733162	1136869	2267874
057	SAMPLE	214811-003	1308410	778684	33386	133150	32507	18127	1252676	1693333	1152574	2272939
060	SAMPLE	214811-004	1294130	766184	32875	125661	30263	17865	1240707	1675881	1137791	2241463
061	SAMPLE	214811-007	1213664	686331	30643	121197	29751	16867	1198277	1719271	1053320	2159705
062	SAMPLE	214811-008	1232817	706694	30791	121287	29691	17053	1217776	1756951	1088758	2213113
063	SAMPLE	214819-001	1330076	776812	32951	124667	30470	18278	1258146	1710368	1150115	2256608
064	CCV		1325587	765999	32593	114595	27648	18117	1274875	1760967	1159445	2320801
065	CCB		1269595	728947	31319	113000	27725	17393	1258713	1794664	1123965	2257726
067	SAMPLE	214819-002	1355124	798329	33480	110389	26794	18540	1270618	1693928	1159601	2271848

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899380941

Date : 09/21/09 Reference : 09i21m00003
Sequence : MET16 09i21m00 Analyzed : 09/21/09 13:18

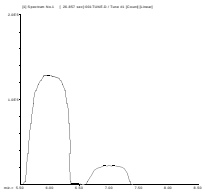
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
068	SAMPLE	214871-001	1369989	802592	33513	109739	26917	18474	1292123	1728452	1191546	2305680
069	SAMPLE	214920-001	1384291	820753	34986	111979	27013	18985	1302783	1709384	1204289	2324272
070	SAMPLE	214955-001	1368879	807654	33767	106001	25956	18543	1308236	1754368	1206772	2318078
071	SAMPLE	214955-002	1296115	749948	31986	100454	24853	17896	1301289	1834591	1147032	2296976
072	SAMPLE	214955-005	1369819	802871	34089	102415	25014	18631	1309623	1757085	1196629	2320050
073	CCV		1360697	781864	33532	94046	22505	18335	1293286	1764944	1173812	2336300
074	CCB		1307637	754377	32022	90208	22045	17926	1300174	1806850	1160853	2302257
076	ICSA		1201851	744880	33910	95886	21372 *	17847	1123679	1444357	1123616	2145326
077	ICSAB		1130549	715586	32167	86329 *	19816 *	17137	1103453	1447230	1124247	2150941

MET16 QC Tune Report

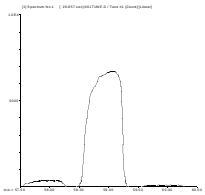
Data File: C:\ICPCHEM\1\DATA\09I21m00.B\001TUNE.D
Date Acquired: Sep 21 2009 01:01 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

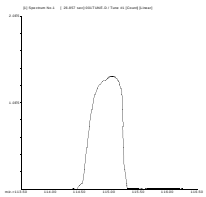
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	128345	128318	129559	129477	0.89	5.00	
59 Co	38665	38794	38974	39132	0.82	5.00	
115 In	724552	717162	723125	730323	1.26	5.00	
205 Tl	99556	100445	100874	101321	0.64	5.00	



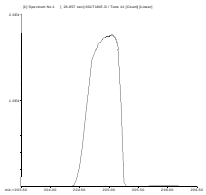
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



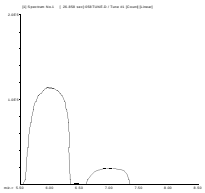
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET16 QC Tune Report

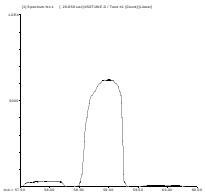
Data File: C:\ICPCHEM\1\DATA\09I21m00.B\058TUNE.D
Date Acquired: Sep 21 2009 11:15 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

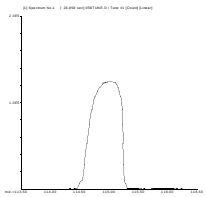
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	107872	112537	112915	113421	1.95	5.00	
59 Co	35017	36262	37088	37103	2.50	5.00	
115 In	689339	698491	700826	699330	0.98	5.00	
205 Tl	92698	92423	92340	91308	1.44	5.00	



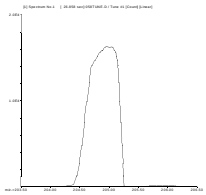
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214804 METALS Filtrate: EPA 6020

Inst : MET16 Reviewer : ---
Calnum : 899380941001 Date : 21-SEP-2009 13:18
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i21m00004	899380941004		21-SEP-2009 13:28	S12854, S12847
L2	09i21m00005	899380941005		21-SEP-2009 13:39	S12855, S12847
L3	09i21m00006	899380941006		21-SEP-2009 13:50	S12856, S12847
L4	09i21m00007	899380941007		21-SEP-2009 14:01	S12857, S12847
L5	09i21m00008	899380941008		21-SEP-2009 14:12	S12852, S12847
L6	09i21m00009	899380941009		21-SEP-2009 14:23	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Chromium	E	0.0832	0.0358	0.0325	0.0281	0.0267	0.0265	BLNK	-0.1272	37.6835		0.0388	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Chromium	E	0.100	87	0.500	10	1.000	10	10.00	4	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16
Calnum : 899380941001 Cal Date : 21-SEP-2009

ICV 899380941010 (09i21m00010 21-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Chromium	E	100.0	103.4	ug/L	3	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941011 File : 09i21m00011 Time : 21-SEP-2009 14:45
Cal : 899380941001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1403683	3.32
Scandium	A	762309	772585	1.35
Scandium	E	39617	39284	-0.84
Scandium	H	292670	265384	-9.32
Germanium	H	72460	65379	-9.77
Germanium	E	22278	21762	-2.32
Indium	A	1290075	1282935	-0.55
Bismuth	A	1934128	1890184	-2.27
Yttrium	A	1133206	1137423	0.37
Terbium	A	2330595	2314630	-0.69

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941035 File : 09i21m00035 Time : 21-SEP-2009 19:05
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0388	0.0273	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1348914	-0.71
Scandium	A	762309	757376	-0.65
Scandium	E	39617	35253	-11.02
Scandium	H	292670	209188	-28.52
Germanium	H	72460	49867	-31.18
Germanium	E	22278	18907	-15.13
Indium	A	1290075	1231347	-4.55
Bismuth	A	1934128	1747133	-9.67
Yttrium	A	1133206	1122793	-0.92
Terbium	A	2330595	2276902	-2.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941036 File : 09i21m00036 Time : 21-SEP-2009 19:15
Cal : 899380941001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1284983	-5.42
Scandium	A	762309	693896	-8.97
Scandium	E	39617	33276	-16.01
Scandium	H	292670	205811	-29.68
Germanium	H	72460	50261	-30.64
Germanium	E	22278	18357	-17.60
Indium	A	1290075	1191541	-7.64
Bismuth	A	1934128	1756664	-9.18
Yttrium	A	1133206	1058454	-6.60
Terbium	A	2330595	2178024	-6.55

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941037 File : 09i21m00037 Time : 21-SEP-2009 19:26
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Chromium	E	15.78	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	113100	ug/L	113
Calcium	A	300000	332200	ug/L	111
Magnesium	A	100000	107900	ug/L	108
Molybdenum	A	2000	2262	ug/L	113
Potassium	A	100000	113700	ug/L	114
Sodium	E	250000	278300	ug/L	111
Iron	H	250000	267900	ug/L	107

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1201183	-11.58
Scandium	A	762309	720930	-5.43
Scandium	E	39617	35358	-10.75
Scandium	H	292670	217326	-25.74
Germanium	H	72460	49034	-32.33
Germanium	E	22278	18423	-17.30
Indium	A	1290075	1066552	-17.33
Bismuth	A	1934128	1440320	-25.53
Yttrium	A	1133206	1067915	-5.76
Terbium	A	2330595	2104185	-9.71

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941038 File : 09i21m00038 Time : 21-SEP-2009 19:37
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	200.0	210.3	ug/L	5	20	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	292670	194560	-33.52
Scandium	A	762309	692276	-9.19
Scandium	E	39617	33875	-14.49
Germanium	H	72460	44741	-38.25
Germanium	E	22278	17681	-20.63
Indium	A	1290075	1044793	-19.01
Yttrium	A	1133206	1064912	-6.03

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941049 File : 09i21m00049 Time : 21-SEP-2009 21:37
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0388	0.0273	100.0	102.9	ug/L	3	10	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1172642	-13.68
Scandium	A	762309	695866	-8.72
Scandium	E	39617	30666	-22.59
Scandium	H	292670	162760	-44.39
Germanium	H	72460	38924	-46.28
Germanium	E	22278	16840	-24.41
Indium	A	1290075	1164512	-9.73
Bismuth	A	1934128	1660004	-14.17
Yttrium	A	1133206	1064807	-6.04
Terbium	A	2330595	2165130	-7.10

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941050 File : 09i21m00050 Time : 21-SEP-2009 21:47
Cal : 899380941001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1155560	-14.94
Scandium	A	762309	676119	-11.31
Scandium	E	39617	29900	-24.53
Scandium	H	292670	163634	-44.09
Germanium	H	72460	40897	-43.56
Germanium	E	22278	16756	-24.79
Indium	A	1290075	1186770	-8.01
Bismuth	A	1934128	1723682	-10.88
Yttrium	A	1133206	1044165	-7.86
Terbium	A	2330595	2160526	-7.30

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941064 File : 09i21m00064 Time : 22-SEP-2009 00:15
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	0.0388	0.0273	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1325587	-2.43
Scandium	A	762309	765999	0.48
Scandium	E	39617	32593	-17.73
Scandium	H	292670	114595	-60.84
Germanium	H	72460	27648	-61.84
Germanium	E	22278	18117	-18.68
Indium	A	1290075	1274875	-1.18
Bismuth	A	1934128	1760967	-8.95
Yttrium	A	1133206	1159445	2.32
Terbium	A	2330595	2320801	-0.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941065 File : 09i21m00065 Time : 22-SEP-2009 00:26
Cal : 899380941001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Chromium	E	ND	0.1000	0.08000	ug/L	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1269595	-6.55
Scandium	A	762309	728947	-4.38
Scandium	E	39617	31319	-20.95
Scandium	H	292670	113000	-61.39
Germanium	H	72460	27725	-61.74
Germanium	E	22278	17393	-21.93
Indium	A	1290075	1258713	-2.43
Bismuth	A	1934128	1794664	-7.21
Yttrium	A	1133206	1123965	-0.82
Terbium	A	2330595	2257726	-3.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941076 File : 09i21m00076 Time : 22-SEP-2009 02:26
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Chromium	E	16.19	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	110600	ug/L	111
Calcium	A	300000	331800	ug/L	111
Magnesium	A	100000	104500	ug/L	105
Molybdenum	A	2000	2249	ug/L	112
Potassium	A	100000	113700	ug/L	114
Sodium	E	250000	274700	ug/L	110
Iron	H	250000	301700	ug/L	121

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1358549	1201851	-11.53
Scandium	A	762309	744880	-2.29
Scandium	E	39617	33910	-14.41
Scandium	H	292670	95886	-67.24
Germanium	H	72460	21372	**-70.51 ***
Germanium	E	22278	17847	-19.89
Indium	A	1290075	1123679	-12.90
Bismuth	A	1934128	1444357	-25.32
Yttrium	A	1133206	1123616	-0.85
Terbium	A	2330595	2145326	-7.95

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214804 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899380941077 File : 09i21m00077 Time : 22-SEP-2009 02:37
Cal : 899380941001 Caldate : 21-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Chromium	E	200.0	214.6	ug/L	7	20	

ISTD (ICALBLK 09i21m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	292670	86329	**-70.50 ***
Scandium	A	762309	715586	-6.13
Scandium	E	39617	32167	-18.81
Germanium	H	72460	19816	**-72.65 ***
Germanium	E	22278	17137	-23.08
Indium	A	1290075	1103453	-14.47
Yttrium	A	1133206	1124247	-0.79

SAMPLE PREPARATION SUMMARY

Batch # : 155041
Started By : VV
Method : METHOD
Spike #1 ID : S12256

Prep Date : 17-SEP-2009 09:00
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214784-001		Filtrate	50	50	1	1.0						PB	
214804-005		Filtrate	50	50	1	1.0						CR	
214811-003		Filtrate	50	50	1	1.0						TAL/ICP	
214811-004		Filtrate	50	50	1	1.0						TAL/ICP	
214811-007		Filtrate	50	50	1	1.0						TAL/ICP	
214811-008		Filtrate	50	50	1	1.0						TAL/ICP	
214819-001		Filtrate	50	50	1	1.0						PB	
214819-002		Filtrate	50	50	1	1.0						PB	
214871-001		Filtrate	50	50	1	1.0						PB	
214920-001		Filtrate	50	50	1	1.0						PB	
214920-002		Filtrate	50	50	1	1.0						PB	
214955-001		Filtrate	50	50	1	1.0						PB	
214955-002		Filtrate	50	50	1	1.0						PB	
214955-003		Filtrate	50	50	1	1.0						PB	
214955-005		Filtrate	50	50	1	1.0						PB	
QC512579	BLANK	Filtrate	50	50	1	1.0							
QC512580	BS	Filtrate	50	50	1	1.0		.25	.25				
QC512581	BSD	Filtrate	50	50	1	1.0		.25	.25				
QC512582	MS	Filtrate	50	50	1	1.0		.25	.25				
QC512583	MSD	Filtrate	50	50	1	1.0		.25	.25				
QC512584	SER	Filtrate	50	50	1	1.0							
QC512585	PDS	Filtrate	50	50	1	1.0							
QC512586	MS	Filtrate	50	50	1	1.0		.25	.25				
QC512587	MSD	Filtrate	50	50	1	1.0		.25	.25				

Reviewed by: JYF Date: 09/22/09

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 155041
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☐ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☒ Filter Prep

bk2886
Page 87

	Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK 512579 QC	QC	50	50	n	
*	BS 80					
*	BSD 81					
*	214920-002 MS					
*	-002 MSD					
*	214955-003 MS					
*	-003 MSD					
	214784-001	I				
	214804-005	E				
10	214811-003	D				
	-004					
	-007	G				
	-008					
	214819-001	H				
15	-002					
	214871-001	H				
	214920-001	I				
	-002	Y				
	214955-001	H				
20	-002					
	-003	V				
	-005	H				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	179714-261	
0.25 mL of spike solution (Std1) was added to all spikes	512256	VV 9-17-09
0.25 mL of spike solution (Std2) was added to all spikes	512257	
digestion temperature (90-95 degrees C)	–	
digestion begun at (time)	–	
concentrated HCl	H19031- Fisher	
concentrated HNO3	H12072-	
digestion ended at (time)	–	
☐ filtered thru' Whatman # 541	–	
Relinquished to ICP group		

9-17-09
Prep Chemist / Date

Continued from page 0.
Continued on page 13.

Michael C Duckett 9/14/09
Reviewed by / Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214805
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-090809A	214805-001
PL-502-9C1	214805-002
BC-2-9C1	214805-003
ASE-61A-9C1	214805-004
BC-1-9C1	214805-005
PL-102A-9C1	214805-006
ASE-21C-9C1	214805-007
BC-15-9C1	214805-008
PL-2103-9C1	214805-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214805**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/10/09**
Samples Received:	**09/10/09**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 09/10/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for 2-hexanone in the CCV analyzed 09/22/09 11:24; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for bromomethane; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for iodomethane in the BS/BSD for batch 155043; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene in the MS/MSD of ASE-21C-9C1 (lab # 214805-007); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High surrogate recoveries were observed for bromofluorobenzene in many samples; no associated target analytes were detected in the sample.

No other analytical problems were encountered.

Metals (EPA 6020) Water:
No analytical problems were encountered.

Metals (EPA 6010B) Filtrate:
No analytical problems were encountered.

Chain of Custody

214805

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: ~~M. Weise~~ - D. Foehr J. Ventes
PO # 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Preservative

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1				TB-090809A	9.8.09	0630				1			X														
2				PL-502-9C1		0640				3			X														
3				BC-2-9C1		0725				3			X														
4				ASE-61A-9C1		0802				~~5~~ 4			X	X													
5				BC-1-9C1		0849				3			X														
6				PL-102A-9C1		0936				5			X							X	X						
7				ASE-21C-9C1		1131				9			X												X		
8				BC-15-9C1		1323				3			X														
9				PL-2103		1414				3			X														
10																											
11																											
12										34																	

Relinquished by	Company: H+A	Received by	Company: FED EX	Condition		Custody Seals Intact	
	Date/Time: 09/09/09 / 11:00		Date/Time: 09/09/09 / 11:00	Cooler Temp.			
Relinquished by	Company:	Received by	Company:	Condition		Custody Seals Intact	
	Date/Time:		Date/Time: 9/10/09 10:10	Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214805 Date Received 9-10-9 Number of coolers 1
Client Honeywell Project Quarterly UST

Date Opened 9-10-9 By (print) S Evans (sign) [signature]
Date Logged in 9/11/9 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
   Shipping info 863056395030

2A. Were custody seals present? ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name Date 9-9-9
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.9

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

FedEx Tracking Number 863056395030

Company Phone

Address

Dept./Floor/Suite/Room

State ZIP

Your Internal Billing Reference

Laboratory Job Number 214805

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-61A-9C1	Batch#:	154927
Matrix:	Water	Sampled:	09/08/09
Units:	ug/L	Received:	09/10/09
Diln Fac:	1.000	Prepared:	09/15/09

Type: SAMPLE Analyzed: 09/17/09
Lab ID: 214805-004

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	93	50-120	

Type: BLANK Analyzed: 09/16/09
Lab ID: QC512111

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	108	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512112	Batch#:	154927
Matrix:	Water	Prepared:	09/15/09
Units:	ug/L	Analyzed:	09/16/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,904	116	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	154927
MSS Lab ID:	214840-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Prepared:	09/15/09
Diln Fac:	1.000	Analyzed:	09/17/09

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC512113

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	60.96	2,500	2,332	91	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC512114

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,371	92	54-120	2	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512115	Batch#:	154927
Matrix:	Water	Prepared:	09/15/09
Units:	ug/L	Analyzed:	09/18/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,770	111	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	108	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214805 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169373434052 File : 259b052 Time : 17-SEP-2009 09:24
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	38492	500.0	447.3	mg/L	-11	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	61930	50.00	43.69	mg/L	-13	15	

JDG 09/17/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/17/09 Reviewer: TFB Date: 09/17/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169373434054 File : 259b054 Time : 17-SEP-2009 10:20
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	55407	500.0	483.0	mg/L	-3	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	59346	50.00	41.87	mg/L	**-16**	15	c-

Analyst: JDG Date: 09/17/09 Reviewer: EAH Date: 09/17/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169373434066 File : 259b066 Time : 17-SEP-2009 16:19
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	39772	500.0	462.1	mg/L	-8	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	64840	50.00	45.74	mg/L	-9	15	

JDG 09/17/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/17/09 Reviewer: TFB Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169373434067 File : 259b067 Time : 17-SEP-2009 16:47
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57704	250.0	251.5	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	59386	50.00	41.89	mg/L	**-16**	15	c-

JDG 09/18/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/17/09 Reviewer: TFB Date: 09/18/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869372587032 File : 258a032 Time : 16-SEP-2009 08:31
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26858	1000	1111	mg/L	11	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31653	50.00	56.34	mg/L	13	15	

JDG 09/16/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/16/09 Reviewer: EAH Date: 09/16/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869372587033 File : 258a033 Time : 16-SEP-2009 09:00
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18206	500.0	502.6	mg/L	1	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29684	50.00	52.84	mg/L	6	15	

Analyst: JDG Date: 09/16/09 Reviewer: TFB Date: 09/16/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
Seqnum : 869372587044.1 File : 258a044 Time : 16-SEP-2009 15:54
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	25615	250.0	264.9	mg/L	6	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29640	50.00	52.76	mg/L	6	15	

Analyst: TFB Date: 09/16/09 * Reviewer: JDG Date: 09/16/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869372587045 File : 258a045 Time : 16-SEP-2009 16:22
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	19636	500.0	542.0	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31664	50.00	56.36	mg/L	13	15	

TFB 09/16/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/16/09 Reviewer: EAH Date: 09/16/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
Seqnum : 869374809015 File : 260a015 Time : 17-SEP-2009 14:15
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	25375	500.0	524.8	mg/L	5	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28757	50.00	51.19	mg/L	2	15	

JDG 09/17/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/17/09 Reviewer: SFL Date: 09/17/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869374809029 File : 260a029 Time : 17-SEP-2009 20:53
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	27007	1000	1117	mg/L	12	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31038	50.00	55.25	mg/L	11	15	

JDG 09/18/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/18/09 Reviewer: TFB Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869374809030 File : 260a030 Time : 17-SEP-2009 21:22
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18728	500.0	516.9	mg/L	3	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31283	50.00	55.69	mg/L	11	15	

JDG 09/18/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/18/09 Reviewer: TFB Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
Seqnum : 869374809047 File : 260a047 Time : 18-SEP-2009 05:23
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26352	500.0	545.0	mg/L	9	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29185	50.00	51.95	mg/L	4	15	

JDG 09/18/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/18/09 Reviewer: TFB Date: 09/18/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869374809048 File : 260a048 Time : 18-SEP-2009 05:52
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	19476	500.0	537.6	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31547	50.00	56.16	mg/L	12	15	

JDG 09/18/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/18/09 Reviewer: TFB Date: 09/18/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169373434

Instrument : GC15B Begun : 09/16/09 07:54
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	259b001	X	PRIMER				09/16/09 07:54	1.0		
002	259b002	X	IB				09/16/09 08:22	1.0		
003	259b003	X	CMARKER				09/16/09 08:50	1.0	1	
004	259b004	CCV	MO_500				09/16/09 09:18	1.0	2	
005	259b005	CCV	DSL_250				09/16/09 09:46	1.0	3	
006	259b006	CCV	BUNK_500				09/16/09 10:14	1.0	4	
007	259b007	BLANK	QC512100	S	Soil	154923	09/16/09 11:50	1.0		
008	259b008	X	214866-001	S	Soil	154923	09/16/09 12:19	1.0		
009	259b009	LCS	QC512101	S	Soil	154923	09/16/09 12:47	1.0		
010	259b010	SAMPLE	214866-008	S	Soil	154923	09/16/09 13:15	1.0		
011	259b011	SAMPLE	214866-002	S	Soil	154923	09/16/09 13:43	1.0		
012	259b012	SAMPLE	214866-003	S	Soil	154923	09/16/09 14:11	1.0		
013	259b013	MSS	214866-004	S	Soil	154923	09/16/09 14:43	1.0		
014	259b014	SAMPLE	214866-005	S	Soil	154923	09/16/09 15:11	1.0		
015	259b015	SAMPLE	214866-006	S	Soil	154923	09/16/09 15:39	1.0		
016	259b016	SAMPLE	214866-007	S	Soil	154923	09/16/09 16:07	1.0		
017	259b017	SAMPLE	214866-001	S	Soil	154923	09/16/09 16:35	1.0		
018	259b018	CCV	MO_500				09/16/09 17:03	1.0	2	
019	259b019	CCV	BUNK_500				09/16/09 17:32	1.0	4	
020	259b020	CCV	DSL_500				09/16/09 18:00	1.0	5	
021	259b021	X	CCV				09/16/09 19:00	1.0	2	
022	259b022	X	CCV				09/16/09 19:28	1.0	4	
023	259b023	X	CCV				09/16/09 19:56	1.0	5	
024	259b024	SAMPLE	214866-002	S	Soil	154923	09/16/09 20:24	1.0		
025	259b025	SAMPLE	214866-003	S	Soil	154923	09/16/09 20:52	1.0		
026	259b026	SAMPLE	214866-006	S	Soil	154923	09/16/09 21:20	1.0		
027	259b027	SAMPLE	214866-008	S	Soil	154923	09/16/09 21:48	1.0		
028	259b028	SAMPLE	214867-001	S	Soil	154923	09/16/09 22:16	1.0		
029	259b029	MSS	214867-003	S	Soil	154923	09/16/09 22:43	1.0		
030	259b030	SAMPLE	214867-008	S	Soil	154923	09/16/09 23:11	10.0		
031	259b031	X	IB				09/16/09 23:39	1.0		
032	259b032	SAMPLE	214867-005	S	Soil	154923	09/17/09 00:06	1.0		
033	259b033	SAMPLE	214867-006	S	Soil	154923	09/17/09 00:34	1.0		
034	259b034	SAMPLE	214867-002	S	Soil	154923	09/17/09 01:02	1.0		
035	259b035	X	CMARKER				09/17/09 01:30	1.0	1	
036	259b036	CCV	MO_500				09/17/09 01:57	1.0	2	
037	259b037	X	DSL_1000				09/17/09 02:25	1.0	6	2:BUNKC:12-40=5900
038	259b038	X	BUNK_500				09/17/09 02:53	1.0	4	
039	259b039	X	CCV				09/17/09 03:21	1.0	2	
040	259b040	CCV	DSL_1000				09/17/09 03:49	1.0	6	
041	259b041	CCV	BUNK_500				09/17/09 04:17	1.0	4	
042	259b042	SAMPLE	214867-004	S	Soil	154923	09/17/09 04:45	1.0		
043	259b043	SAMPLE	214867-009	S	Soil	154923	09/17/09 05:13	1.0		
044	259b044	SAMPLE	214867-010	S	Soil	154923	09/17/09 05:40	1.0		
045	259b045	SAMPLE	214867-007	S	Soil	154923	09/17/09 06:08	1.0		
046	259b046	MS	QC512102	S	Soil	154923	09/17/09 06:36	1.0		
047	259b047	MSD	QC512103	S	Soil	154923	09/17/09 07:04	1.0		
048	259b048	MS	QC512104	S	Soil	154923	09/17/09 07:32	1.0		
049	259b049	MSD	QC512105	S	Soil	154923	09/17/09 07:59	1.0		
050	259b050	SAMPLE	214866-002		Soil	154923	09/17/09 08:27	1.0		
051	259b051	SAMPLE	214866-006		Soil	154923	09/17/09 08:55	1.0		
052	259b052	CCV	MO_500				09/17/09 09:24	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169373434

Instrument : GC15B Begun : 09/16/09 07:54
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	259b053	CCV	BUNK_500				09/17/09 09:52	1.0	4	
054	259b054	CCV	DSL_500				09/17/09 10:20	1.0	5	
055	259b055	SAMPLE	214867-001	S	Soil	154923	09/17/09 10:48	1.0		
056	259b056	SAMPLE	214867-001		Soil	154923	09/17/09 11:16	1.0		
057	259b057	SAMPLE	214867-007	S	Soil	154923	09/17/09 11:44	1.0		
058	259b058	SAMPLE	214867-007		Soil	154923	09/17/09 12:12	1.0		
059	259b059	MS	QC512102	S	Soil	154923	09/17/09 12:43	1.0		
060	259b060	MS	QC512104	S	Soil	154923	09/17/09 13:11	1.0		
061	259b061	MS	QC512104		Soil	154923	09/17/09 13:39	1.0		
062	259b062	X	IB				09/17/09 14:27	1.0		
063	259b063	SAMPLE	214805-004		Water	154927	09/17/09 14:55	1.0		
064	259b064	SAMPLE	214821-020		Water	154927	09/17/09 15:23	1.0		
065	259b065	X	CMARKER				09/17/09 15:51	1.0	1	
066	259b066	CCV	MO_500				09/17/09 16:19	1.0	2	
067	259b067	CCV	DSL_250				09/17/09 16:47	1.0	3	
068	259b068	CCV	BUNK_500				09/17/09 17:15	1.0	4	
069	259b069	BLANK	QC512480		Soil	155020	09/17/09 19:13	1.0		
070	259b070	MSS	214855-002		Soil	155020	09/17/09 19:41	1.0		
071	259b071	MS	QC512482		Soil	155020	09/17/09 20:09	1.0		2:BUNKC:12-40=5600
072	259b072	MSD	QC512483		Soil	155020	09/17/09 20:37	1.0		2:BUNKC:12-40=5400
073	259b073	SAMPLE	214855-001		Soil	155020	09/17/09 21:04	10.0		
074	259b074	X	IB				09/17/09 21:32	1.0		
075	259b075	SAMPLE	214952-001		Soil	155020	09/17/09 22:00	1.0		
076	259b076	SAMPLE	214952-003		Soil	155020	09/17/09 22:28	1.0		
077	259b077	SAMPLE	214855-004		Soil	155020	09/17/09 22:56	1.0		
078	259b078	SAMPLE	214855-005		Soil	155020	09/17/09 23:24	1.0		
079	259b079	SAMPLE	214855-003		Soil	155020	09/17/09 23:52	1.0		
080	259b080	CCV	MO_500				09/18/09 00:20	1.0	2	
081	259b081	CCV	BUNK_500				09/18/09 00:48	1.0	4	
082	259b082	CCV	DSL_500				09/18/09 01:16	1.0	5	
083	259b083	X	CCV				09/18/09 01:44	1.0	2	
084	259b084	X	CCV				09/18/09 02:12	1.0	4	
085	259b085	X	CCV				09/18/09 02:40	1.0	5	
086	259b086	BLANK	QC512480	S	Soil	155020	09/18/09 03:08	1.0		
087	259b087	LCS	QC512481	S	Soil	155020	09/18/09 03:35	1.0		
088	259b088	LCS	QC512484	S	Soil	155020	09/18/09 04:04	1.0		
089	259b089	SAMPLE	214866-006	S	Soil	155020	09/18/09 04:32	1.0		
090	259b090	SAMPLE	214866-002	S	Soil	155020	09/18/09 05:00	1.0		
091	259b091	SAMPLE	214952-002		Soil	155020	09/18/09 05:28	1.0		
092	259b092	X	IB				09/18/09 05:57	1.0		
093	259b093	SAMPLE	214761-006	S	Soil	155020	09/18/09 06:25	1.0		
094	259b094	SAMPLE	214761-017	S	Soil	155020	09/18/09 06:53	1.0		
095	259b095	SAMPLE	214761-005	S	Soil	155020	09/18/09 07:22	1.0		
096	259b096	SAMPLE	214761-004	S	Soil	155020	09/18/09 07:50	1.0		
097	259b097	X	CMARKER				09/18/09 08:18	1.0	1	
098	259b098	X	MO_500				09/18/09 08:46	1.0	2	
099	259b099	X	DSL_1000				09/18/09 09:14	1.0	6	
100	259b100	X	BUNK_500				09/18/09 09:43	1.0	4	
101	259b101	X	CCV				09/18/09 10:36	1.0	2	
102	259b102	X	CCV				09/18/09 11:04	1.0	6	2:BUNKC:12-40=6000
103	259b103	CCV	MO_500				09/18/09 12:01	1.0	2	
104	259b104	CCV	BUNK_500				09/18/09 12:29	1.0	4	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169373434

Instrument : GC15B Begun : 09/16/09 07:54
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
105	259b105	CCV	DSL_1000				09/18/09 12:57	1.0	6	
106	259b106	SAMPLE	214840-014		Water	154927	09/18/09 13:27	1.0		

TFB 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 54.

JDG 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 55 through 95.

TFB 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 96 through 105.

JDG 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs ??? through ???.

Standards used: 1=S11248 2=S12822 3=S12545 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813
12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895
23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869372587

Instrument : GC26A Begun : 09/15/09 17:47
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	258a001	X	PRIMER				09/15/09 17:47	1.0		
002	258a002	X	IB				09/15/09 18:15	1.0		
003	258a003	X	CMARKER				09/15/09 18:44	1.0	1	
004	258a004	CCV	DSL_250				09/15/09 19:12	1.0	2	
005	258a005	CCV	MO_500				09/15/09 19:40	1.0	3	
006	258a006	BLANK	QC511966		Soil	154889	09/15/09 20:17	1.0		
007	258a007	LCS	QC511967		Soil	154889	09/15/09 20:45	1.0		
008	258a008	SAMPLE	214821-004		Soil	154889	09/15/09 21:13	1.0		
009	258a009	SAMPLE	214821-006		Soil	154889	09/15/09 21:41	20.0		
010	258a010	SAMPLE	214821-007		Soil	154889	09/15/09 22:10	1.0		
011	258a011	SAMPLE	214821-008		Soil	154889	09/15/09 22:38	10.0		
012	258a012	SAMPLE	214821-009		Soil	154889	09/15/09 23:06	20.0		
013	258a013	SAMPLE	214821-011		Soil	154889	09/15/09 23:34	1.0		
014	258a014	X	IB				09/16/09 00:02	1.0		
015	258a015	MSS	214821-001		Soil	154889	09/16/09 00:31	1.0		
016	258a016	SAMPLE	214821-010		Soil	154889	09/16/09 00:59	1.0		
017	258a017	CCV	DSL_500				09/16/09 01:27	1.0	4	
018	258a018	CCV	MO_500				09/16/09 01:56	1.0	3	
019	258a019	X	CCV				09/16/09 02:24	1.0	4	
020	258a020	X	CCV				09/16/09 02:52	1.0	3	
021	258a021	SAMPLE	214821-012		Soil	154889	09/16/09 03:20	10.0		
022	258a022	MSS	214821-015		Soil	154889	09/16/09 03:49	1.0		
023	258a023	SAMPLE	214821-018		Soil	154889	09/16/09 04:17	1.0		
024	258a024	SAMPLE	214821-019		Soil	154889	09/16/09 04:45	10.0		
025	258a025	SAMPLE	214821-002		Soil	154889	09/16/09 05:14	1.0		
026	258a026	SAMPLE	214821-003		Soil	154889	09/16/09 05:42	1.0		
027	258a027	SAMPLE	214821-005		Soil	154889	09/16/09 06:11	1.0		
028	258a028	SAMPLE	214821-013		Soil	154889	09/16/09 06:39	1.0		
029	258a029	SAMPLE	214821-016		Soil	154889	09/16/09 07:07	1.0		
030	258a030	SAMPLE	214821-017		Soil	154889	09/16/09 07:35	1.0		
031	258a031	X	CMARKER				09/16/09 08:03	1.0	1	
032	258a032	CCV	DSL_1000				09/16/09 08:31	1.0	5	
033	258a033	CCV	MO_500				09/16/09 09:00	1.0	3	
034	258a034	BLANK	QC512111		Water	154927	09/16/09 09:54	1.0		
035	258a035	LCS	QC512112		Water	154927	09/16/09 10:22	1.0		
036	258a036	SAMPLE	214874-001		Water	154927	09/16/09 10:51	1.0		
037	258a037	SAMPLE	214821-019		Soil	154889	09/16/09 11:56	1.0		
038	258a038	LCS	QC511858	S	Soil	154865	09/16/09 12:48	1.0		
039	258a039	MSD	QC511666	S	Water	154811	09/16/09 13:18	1.0		
040	258a040	SAMPLE	214821-012		Soil	154889	09/16/09 13:48	1.0		
041	258a041	BS	QC511542		Water	154780	09/16/09 14:26	1.0		
042	258a042	BSD	QC511543		Water	154780	09/16/09 14:54	1.0		
043	258a043	SAMPLE	214679-008	S	Soil	154828	09/16/09 15:22	1.0		
044	258a044	CCV	DSL_250				09/16/09 15:54	1.0	2	
045	258a045	CCV	MO_500				09/16/09 16:22	1.0	3	
046	258a046	SAMPLE	214679-010	S	Soil	154828	09/16/09 17:05	3.0		
047	258a047	SAMPLE	214679-009	S	Soil	154828	09/16/09 17:56	1.0		
048	258a048	SAMPLE	214679-007	S	Soil	154828	09/16/09 18:24	1.0		
049	258a049	LCS	QC511742	S	Soil	154828	09/16/09 19:21	1.0		
050	258a050	LCS	QC511745	S	Soil	154828	09/16/09 19:49	1.0		
051	258a051	MS	QC511859		Soil	154865	09/16/09 20:18	1.0		2:BUNKC:12-50=6100
052	258a052	MSD	QC511860		Soil	154865	09/16/09 20:46	1.0		2:BUNKC:12-50=7600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869372587

Instrument : GC26A Begun : 09/15/09 17:47
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	258a053	X	IB				09/16/09 21:14	1.0		
054	258a054	BLANK	QC512062	S	Soil	154916	09/16/09 21:42	1.0		
055	258a055	LCS	QC512063	S	Soil	154916	09/16/09 22:11	1.0		
056	258a056	LCS	QC512070	S	Soil	154916	09/16/09 22:39	1.0		
057	258a057	X	CMARKER				09/16/09 23:07	1.0	1	
058	258a058	CCV	DSL_1000				09/16/09 23:35	1.0	5	
059	258a059	CCV	MO_500				09/17/09 00:03	1.0	3	
060	258a060	X	CCV				09/17/09 00:32	1.0	5	
061	258a061	X	CCV				09/17/09 01:00	1.0	3	
062	258a062	SAMPLE	214679-004	S	Soil	154916	09/17/09 01:28	1.0		
063	258a063	SAMPLE	214679-005	S	Soil	154916	09/17/09 01:56	1.0		
064	258a064	SAMPLE	214679-006	S	Soil	154916	09/17/09 02:25	1.0		
065	258a065	MSS	214849-003	S	Soil	154916	09/17/09 02:53	1.0		
066	258a066	MS	QC512066	S	Soil	154916	09/17/09 03:21	1.0		
067	258a067	MSD	QC512067	S	Soil	154916	09/17/09 03:50	1.0		
068	258a068	CCV	DSL_500				09/17/09 04:18	1.0	4	
069	258a069	CCV	MO_500				09/17/09 04:47	1.0	3	

JDG 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 35.

JDG 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 36 through 38.

TFB 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 39 through 69.

Standards used: 1=S11825 2=S12545 3=S12462 4=S12546 5=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869374809

Instrument : GC26A Begun : 09/17/09 06:49
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	260a001	X	IB				09/17/09 06:49	1.0	
002	260a002	X	CMARKER				09/17/09 07:18	1.0	1
003	260a003	CCV	DSL_1000				09/17/09 07:46	1.0	2
004	260a004	CCV	MO_500				09/17/09 08:14	1.0	3
005	260a005	BS	QC511842	S	Water	154860	09/17/09 08:54	1.0	
006	260a006	BSD	QC511843	S	Water	154860	09/17/09 09:23	1.0	
007	260a007	PREPBLK	QC511844	S	WET DI Leachate	154860	09/17/09 09:51	1.0	
008	260a008	CCV	JP5_250				09/17/09 10:56	1.0	4
009	260a009	MSS	214840-001	S	Water	154927	09/17/09 11:24	1.0	
010	260a010	BLANK	QC511841	S	Water	154860	09/17/09 11:53	1.0	
011	260a011	CCV	DSL_250				09/17/09 12:21	1.0	5
012	260a012	CCV	MO_500				09/17/09 12:50	1.0	3
013	260a013	CCV	JP5_250				09/17/09 13:18	1.0	4
014	260a014	BLANK	QC511741	S	Soil	154828	09/17/09 13:47	1.0	
015	260a015	CCV	DSL_500				09/17/09 14:15	1.0	6
016	260a016	CCV	MO_500				09/17/09 14:44	1.0	3
017	260a017	CCV	JP5_250				09/17/09 15:12	1.0	4
018	260a018	BLANK	QC512111	S	Water	154927	09/17/09 15:40	1.0	
019	260a019	LCS	QC512112	S	Water	154927	09/17/09 16:09	1.0	
020	260a020	MS	QC512113	S	Water	154927	09/17/09 16:37	1.0	
021	260a021	MSD	QC512114	S	Water	154927	09/17/09 17:06	1.0	
022	260a022	SAMPLE	214840-002	S	Water	154927	09/17/09 17:34	1.0	
023	260a023	SAMPLE	214840-003	S	Water	154927	09/17/09 18:03	1.0	
024	260a024	SAMPLE	214840-004	S	Water	154927	09/17/09 18:31	1.0	
025	260a025	SAMPLE	214840-005	S	Water	154927	09/17/09 19:00	1.0	
026	260a026	SAMPLE	214840-006	S	Water	154927	09/17/09 19:28	1.0	
027	260a027	SAMPLE	214840-007	S	Water	154927	09/17/09 19:56	1.0	
028	260a028	X	CMARKER				09/17/09 20:25	1.0	1
029	260a029	CCV	DSL_1000				09/17/09 20:53	1.0	2
030	260a030	CCV	MO_500				09/17/09 21:22	1.0	3
031	260a031	CCV	JP5_250				09/17/09 21:50	1.0	4
032	260a032	X	CCV				09/17/09 22:18	1.0	2
033	260a033	X	CCV				09/17/09 22:47	1.0	3
034	260a034	X	CCV				09/17/09 23:15	1.0	4
035	260a035	SAMPLE	214731-002	S	Soil	154916	09/17/09 23:43	1.0	
036	260a036	SAMPLE	214731-001	S	Soil	154916	09/18/09 00:11	1.0	
037	260a037	X	IB				09/18/09 00:40	1.0	
038	260a038	SAMPLE	214840-008	S	Water	154927	09/18/09 01:08	1.0	
039	260a039	SAMPLE	214840-009	S	Water	154927	09/18/09 01:37	1.0	
040	260a040	SAMPLE	214840-010	S	Water	154927	09/18/09 02:05	1.0	
041	260a041	SAMPLE	214840-011	S	Water	154927	09/18/09 02:33	1.0	
042	260a042	SAMPLE	214840-012	S	Water	154927	09/18/09 03:02	1.0	
043	260a043	SAMPLE	214840-013	S	Water	154927	09/18/09 03:30	1.0	
044	260a044	SAMPLE	214840-014	S	Water	154927	09/18/09 03:58	1.0	
045	260a045	LCS	QC512115		Water	154927	09/18/09 04:26	1.0	
046	260a046	X	CMARKER				09/18/09 04:55	1.0	1
047	260a047	CCV	DSL_500				09/18/09 05:23	1.0	6
048	260a048	CCV	MO_500				09/18/09 05:52	1.0	3
049	260a049	CCV	JP5_250				09/18/09 06:21	1.0	4
050	260a050	X	CCV				09/18/09 06:49	1.0	6
051	260a051	X	CCV				09/18/09 07:18	1.0	3
052	260a052	X	CCV				09/18/09 07:46	1.0	4

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869374809

Instrument : GC26A Begun : 09/17/09 06:49
Method : EPA 8015B SOP Version : TEH_rv13

TFB 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDG 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 16.

JDG 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 17 through 52.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12969 5=S12545 6=S12546

SAMPLE PREPARATION SUMMARY

Batch # : 154927
Started By : DJT
Method : 3520C
Spike #1 ID : S12934

Prep Date : 15-SEP-2009 13:55
SOP Version : TEH_3520_rv12
Spike #2 ID : S12895

Analysis : TEH
Finished By : DJT
Units : mL
Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214805-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214821-020		Water	500	2.5	1	0.005	5	.5				TEHM	
214840-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
214840-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214840-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	possible 2x surr
214852-001		Water	1000	5	1	0.005	7	1				TEHM	
214852-002		Water	1000	5	1	0.005	7	1				TEHM	
214874-001		Water	500	2.5	1	0.005	5	.5				TEHM	
QC512111	BLANK	Water	1000	5	1	0.005		1			3630C		
QC512112	LCS	Water	1000	5	1	0.005		1	1		3630C		
QC512113	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC512114	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC512115	LCS	Water	1000	5	1	0.005		1		1			

Analyst: TFB Date: 09/18/09 Reviewer: JDG Date: 09/18/09

Extractable Organics
SAMPLE PREP CHECKLIST

Curtis & Tompkins, Ltd.

Batch No: 154927 Start Date: 9/15/09 Analysis: TEHM

Matrix (Circle): (Water) Soil Misc. Leachate Oil Wipe Air Other: _____

BATCH BEGUN

Yes	No	N/A		Peer Reviewed
☒	☐	☐	1. Extraction begun within holding time for all samples (if no, explain below)	☒
☒	☐	☐	2. All extractions started using SOP initial weights and volumes? If not,	☒
			☐ insufficient volume available	
			☐ surrogate volume adjusted proportionally to sample weight/volume	
			☐ other (describe):	
☒	☐	☐	3. MS/MSD included in this batch? If not,	☒
			☐ insufficient volume available	
			☐ other (describe):	
☒	☐	☐	4. Correct standards and reagents used and identified on prep log	☒
☒	☐	☐	5. Benchbook entries complete & legible (cross-outs initialed)	☒

Extraction Started by/ Date: [signature] 9/15/09

BATCH COMPLETED

☒	☐	☐	6. All extractions completed using SOP final volumes? If not,	☒
			☐ sample(s) wouldn't concentrate to SOP volume	
			☐ final volume adjusted proportionally to initial weight/volume	
			☐ other (describe):	
☒	☐	☐	7. Benchbook entries complete & legible (cross-outs initialed)	☒
☐	☐	☐	8. (Silica Gel) / Florisil Cleanup Log present & complete (if necessary)	☒
☒	☐	☐	9. Benchbook & aliquot log entries match LIMS prep entry	☒
☐	☐	☒	10. GPC Cleanup Log present & complete (if necessary)	☒
☐	☐	☒	11. Leachate (TCLP, SPLP, STLC) Prep Log present & complete (if necessary)	☒
☐	☐	☒	12. Corrective Action Records initiated & present if necessary (CAR#)	☒

Extraction Completed by/ Date: [signature] 9/16/09

Comments: _____

☐ ☐ ☐ 13. Paperwork reviewed & scanned into LIMS by (Initials/Date): TFB 9/18/09

214805 TEHM Water

Client	: CH2M Hill	Proj Mgr	: AMK
Account Code	: CH2MTAZ	Logged By	: SJE
Site	: Quarterly UST	Dry Wt	: Y
Projectnum	: 371016.SH.60.61.QS (ARIZONA)	Report Level	: III
Contact	: Jennifer Peterson	Order Date	: 09/10
First Log In	: 09/11 16:26	Last Addition	: 09/11 16:26

* Must do a motor oil LCS
* Shaker table ok
* Report Everything from one analytical run.
* Arizona rules, No SEP FUNNEL TEHM/8015AZ
* ALWAYS PRINT FORMS TWICE in order for all flagging to be correct.
* TEH Analysis Hold=14days! ICP: P$/SD

Sample	Client ID	Sampled	Hold	Due	OEXT	VOA	MET	WET	Cont
214805-004	ASE-61A-9C1	09/08 08:02	09/15	09/22	1	1	0	0	4

Total count: 1

214821 TEHM Water

Client	: C/P/E Environmental Services, LLC	Proj Mgr	: MRS
Account Code	: CPE	Logged By	: MFV
Site	: SLAC	Dry Wt	: Y
Projectnum	: 123.210.155	Report Level	: IV
Contact	: Maria Elena Rios	Order Date	: 09/11
First Log In	: 09/14 07:26	Last Addition	: 09/15 10:21

* report Motor Oil only

A: J to MDL, J to MDL if available

Sample	Client ID	Sampled	Hold	Due	OEXT	VOA	MET	WET	Cont
214821-020	S16SWL-EB-0909-01	09/11 14:40	09/25	09/18	1	0	0	0	1

Total count: 1

LIST FOR 214821 TEHM Water

List # : 71128 Project : 123.210.155 Effective : 01-SEP-2009 Generated : 09/15/09 10:23
Method : EPA 8015B Units : ug/L

Analyte		RL	BS %REC	BSD	MS %REC	MSD	J	Flags
Diesel C10-C28	+	50	53-123	36	47-136	36	M	S
Motor Oil C20-C36	+	300					M	P
Hydraulic Fluid, C12-40	+	300					O	P
o-Terphenyl			60-130		60-130		M	

214840 TEHM Water

Client	: Shaw E&I	Proj Mgr	: AMK
Account Code	: SHAW	Logged By	: SJE
Site	: CTO11/CAAC	Dry Wt	: Y
Projectnum	: CTO11 (NAVY)	Report Level	: III
Contact	: Junn Masongsong	Order Date	: 09/10
First Log In	: 09/14 12:43	Last Addition	: 09/14 12:46

* Silica Gel
* JP5
* Sonicate ONLY
* Soils: MS/MSD

Sample	Client ID	Sampled	Hold	Due	OEXT	VOA	MET	WET	Cont
214840-001 MS/MSD	CTO11-CAAC-DVE4-091009	09/10 14:35	09/17	09/16	1	2	0	0	12
214840-002	CTO11-CAAC-DVE10-091009	09/10 12:20	09/17	09/16	1	2	0	0	6
214840-003	CTO11-CAAC-DVE11-091009	09/10 12:35	09/17	09/16	1	2	0	0	6
214840-004	CTO11-CAAC-DVE12-091009	09/10 12:45	09/17	09/16	1	2	0	0	6
214840-005	CTO11-CAAC-DVE13-091009	09/10 08:45	09/17	09/16	1	2	0	0	6
214840-006	CTO11-CAAC-DVE42-091009	09/10 13:50	09/17	09/16	1	2	0	0	6
214840-007	CTO11-CAAC-DP2-091009	09/10 10:30	09/17	09/16	1	2	0	0	6
214840-008	CTO11-CAAC-DP15-091009	09/10 13:25	09/17	09/16	1	2	0	0	6
214840-009	CTO11-CAAC-DP27-091009	09/10 14:00	09/17	09/16	1	2	0	0	6
214840-010	CTO11-CAAC-DP28-091009	09/10 13:10	09/17	09/16	1	2	0	0	6
214840-011	CTO11-CAAC-AS2-091009	09/10 10:15	09/17	09/16	1	2	0	0	6
214840-012	CTO11-CAAC-AS9-091009	09/10 11:15	09/17	09/16	1	2	0	0	6
214840-013	CTO11-CAAC-AS13-091009	09/10 09:15	09/17	09/16	1	2	0	0	6
214840-014	CTO11-CAAC-AS18-091009	09/10 09:45	09/17	09/16	1	2	0	0	6

Total count: 14

LIST FOR 214840 TEHM Water

List # : 61783 Project : CTO11 Generated : 09/14/09 12:50
Method : EPA 8015B Units : ug/L J Flagging : N

Analyte		RL	BS %REC	BSD	MS %REC	MSD	Flags
JP-5 C10-C16	+	50					
Diesel C12-C24	+	50	55-125	36	48-136	37	
Motor Oil C24-C36		300					
o-Terphenyl			60-130		60-130		**OP**
Hexacosane	+		62-138		62-138		OP

214852 TEHM Water

Client	: CH2M Hill Constructors Inc.	Proj Mgr	: LJB
Account Code	: CCI	Logged By	: SJE
Site	: FOPL B493/971 Addition Investigation	Dry Wt	: Y
Projectnum	: 264204.14.A1 (USACE)	Report Level	: III
Contact	: Daisy Digmanese	Order Date	: 09/10
First Log In	: 09/14 15:32	Last Addition	: 09/14 15:32

* Must Sonicate soils
* Full liter for water
* Need LCS for Motor oil
* TEHM
* 1 instrument per batch
* J to MDL-applies to Wet Chem too!

A: J to MDL

Sample	Client ID	Sampled	Hold	Due	OEXT	VOA	MET	WET	Cont
214852-001	FOPLBE10GB0200-G	09/09 09:56	09/16	09/22	2	0	0	0	4
214852-002	FOPLBE10GB0201-G	09/09 11:07	09/16	09/22	2	0	0	0	4

Total count: 2

LIST FOR 214852 TEHM Water

List # : 67810 Account : CCI Effective : 12-JAN-2009 Generated : 09/14/09 15:33
Method : EPA 8015B Units : ug/L J Flagging : **M**

Analyte	RL	BS %REC	BSD	MS %REC	MSD	Flags
Diesel C10-C24	50	**61-143**	**30**	**61-143**	**30**	**OP**
Motor Oil C24-C36	300	**60-120**	**30**	**60-120**	30	**OP**
o-Terphenyl		**57-132**		**57-132**		

214874 TEHM Water RUSH 46

Client	: Cook Environmental Services	Proj Mgr	: MRS
Account Code	: COOK	Logged By	: MRS
Site	: Havens Elementary	Dry Wt	: N
Projectnum	: 1052	Report Level	: II
Contact	: Tim Cook	Order Date	: 09/15
First Log In	: 09/15 13:01	Last Addition	: 09/15 13:01

Sample	Client ID	Sampled	Hold	Due	OEXT	VOA	MET	WET	Cont
214874-001	GP-6	09/15 11:00	09/29	09/16	1	1	0	0	4

Total count: 1

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

Page 38 BK 2909

LIMS Batch No: 154927
LIMS Analysis: TEHM
Date Extracted: 9/15/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214805-004	D	500	7	2.5		
214821-020	A		5			
214840-001	L		7		X	MSS
002	F					
003						
004						
005						
006						
007						
008						
009						
010						
011						
012						
013						
014						POSS 2x SURR
214852-001	C	1000		5.0		
002						
214874-001	D	500	~~7~~ 5 DJT 9/16/09	2.5		*
MB QC512111	NA	1000	NA	5.0	X	
LCS 2						
MS 3	K	500	7	2.5		
MSD 4						
LCS 5	NA	1000	NA	5.0		

	Mfg & Lot# / LIMS # / Time	Date/ Initials
1.0/0.5 mL of TEH_SURR was added to all samples	S129343	DJT 9/15/09
1.0/0.5 mL of TEH_SP was added to all spikes	S12895A / S12290C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS086519	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	*1355/1830	
Extraction End Time:	823 / 1230	DDC 9/16/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	DJT 9/16/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM9007904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/15/09
Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

TFB 9/18/09
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: TWY
Cleanup Date: 9/17/09 (logged on 9/18/09)

Benchbook # **BK 2939**
Page 8

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
214840-001	154927	1.0	1.0	MSS
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
MB QC572111				
LCS 2				
MS 3				
MSD 4				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	TWY 9/18/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11910	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM49182	
Concentrated to volumes as noted above	✓	

9/18/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

TFB 9/18/09
Reviewed by / Date

Laboratory Job Number 214805

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090809A	Batch#:	155043
Lab ID:	214805-001	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090809A	Batch#:	155043
Lab ID:	214805-001	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	126 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-502-9C1	Batch#:	155043
Lab ID:	214805-002	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	1.9	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-502-9C1	Batch#:	155043
Lab ID:	214805-002	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	122 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-2-9C1	Batch#:	155043
Lab ID:	214805-003	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	0.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	6.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.5	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-2-9C1	Batch#:	155043
Lab ID:	214805-003	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	122 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-9C1	Batch#:	155043
Lab ID:	214805-004	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	1.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.5	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	0.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.6	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-9C1	Batch#:	155043
Lab ID:	214805-004	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	127 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-1-9C1	Batch#:	155043
Lab ID:	214805-005	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-1-9C1	Batch#:	155043
Lab ID:	214805-005	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	122 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-102A-9C1	Batch#:	155043
Lab ID:	214805-006	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	4.1	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.5	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-102A-9C1	Batch#:	155043
Lab ID:	214805-006	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	125 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	M1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-15-9C1	Batch#:	155043
Lab ID:	214805-008	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-15-9C1	Batch#:	155043
Lab ID:	214805-008	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2103-9C1	Batch#:	155153
Lab ID:	214805-009	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2103-9C1	Batch#:	155153
Lab ID:	214805-009	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	125 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155043
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512589

Analyte	Spiked	Result	%REC		Limits	ADEQ Flags
Freon 12	25.00	27.75	111		56-140	
Chloromethane	25.00	22.04	88		46-142	
Vinyl Chloride	25.00	23.67	95		49-136	
Bromomethane	25.00	29.23	117		42-154	
Chloroethane	25.00	26.53	106		51-133	
Trichlorofluoromethane	25.00	24.58	98		63-135	
Iodomethane	25.00	32.92	132	*	70-130	L1
Acetone	25.00	23.98	96		48-130	
1,1-Dichloroethene	25.00	25.48	102		68-133	
Methylene Chloride	25.00	25.55	102		71-120	
Carbon Disulfide	25.00	24.32	97		56-120	
MTBE	25.00	24.15	97		58-120	
trans-1,2-Dichloroethene	25.00	27.00	108		80-120	
Vinyl Acetate	25.00	24.92	100		63-124	
1,1-Dichloroethane	25.00	26.00	104		77-120	
2-Butanone	25.00	24.57	98		57-120	
cis-1,2-Dichloroethene	25.00	25.75	103		75-120	
2,2-Dichloropropane	25.00	25.45	102		72-128	
Chloroform	25.00	23.91	96		78-120	
Bromochloromethane	25.00	26.03	104		78-120	
1,1,1-Trichloroethane	25.00	24.24	97		78-120	
1,1-Dichloropropene	25.00	24.51	98		75-120	
Carbon Tetrachloride	25.00	22.78	91		80-120	
1,2-Dichloroethane	25.00	23.74	95		74-120	
Benzene	25.00	26.00	104		77-120	
Trichloroethene	25.00	24.43	98		78-122	
1,2-Dichloropropane	25.00	25.42	102		76-120	
Bromodichloromethane	25.00	25.39	102		78-120	
Dibromomethane	25.00	24.65	99		77-120	
4-Methyl-2-Pentanone	25.00	23.05	92		65-120	
cis-1,3-Dichloropropene	25.00	27.23	109		76-120	
Toluene	25.00	25.50	102		73-120	
trans-1,3-Dichloropropene	25.00	24.30	97		72-120	
1,1,2-Trichloroethane	25.00	26.26	105		76-120	
2-Hexanone	25.00	23.22	93		57-121	
1,3-Dichloropropane	25.00	26.60	106		75-120	
Tetrachloroethene	25.00	23.48	94		77-120	
Dibromochloromethane	25.00	25.52	102		76-120	
1,2-Dibromoethane	25.00	25.88	104		77-120	
Chlorobenzene	25.00	25.24	101		78-120	
1,1,1,2-Tetrachloroethane	25.00	24.79	99		77-120	
Ethylbenzene	25.00	25.86	103		78-120	
m,p-Xylenes	50.00	54.14	108		77-120	
o-Xylene	25.00	26.39	106		77-120	
Styrene	25.00	27.56	110		77-120	
Bromoform	25.00	23.79	95		74-121	
Isopropylbenzene	25.00	22.98	92		71-120	
1,1,2,2-Tetrachloroethane	25.00	25.79	103		73-120	
1,2,3-Trichloropropane	25.00	26.17	105		72-120	
Propylbenzene	25.00	26.36	105		76-120	
Bromobenzene	25.00	24.49	98		75-120	

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155043
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	25.34	101	77-120	
2-Chlorotoluene	25.00	26.51	106	76-120	
4-Chlorotoluene	25.00	26.41	106	78-120	
tert-Butylbenzene	25.00	24.91	100	76-120	
1,2,4-Trimethylbenzene	25.00	24.77	99	77-120	
sec-Butylbenzene	25.00	24.26	97	80-120	
para-Isopropyl Toluene	25.00	22.21	89	76-120	
1,3-Dichlorobenzene	25.00	25.27	101	75-120	
1,4-Dichlorobenzene	25.00	24.88	100	77-120	
n-Butylbenzene	25.00	27.09	108	76-120	
1,2-Dichlorobenzene	25.00	25.38	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	26.05	104	65-120	
1,2,4-Trichlorobenzene	25.00	22.23	89	73-121	
Hexachlorobutadiene	25.00	22.95	92	73-123	
Naphthalene	25.00	24.89	100	62-121	
1,2,3-Trichlorobenzene	25.00	23.75	95	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155043
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512590

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	25.70	103	56-140	8	24	
Chloromethane	25.00	21.78	87	46-142	1	24	
Vinyl Chloride	25.00	22.39	90	49-136	6	24	
Bromomethane	25.00	28.84	115	42-154	1	24	
Chloroethane	25.00	24.62	98	51-133	7	25	
Trichlorofluoromethane	25.00	22.56	90	63-135	9	20	
Iodomethane	25.00	32.72	131 *	70-130	1	20	L1
Acetone	25.00	21.64	87	48-130	10	41	
1,1-Dichloroethene	25.00	22.90	92	68-133	11	20	
Methylene Chloride	25.00	23.90	96	71-120	7	20	
Carbon Disulfide	25.00	22.25	89	56-120	9	20	
MTBE	25.00	23.14	93	58-120	4	21	
trans-1,2-Dichloroethene	25.00	24.57	98	80-120	9	24	
Vinyl Acetate	25.00	23.12	92	63-124	8	24	
1,1-Dichloroethane	25.00	23.61	94	77-120	10	20	
2-Butanone	25.00	22.46	90	57-120	9	32	
cis-1,2-Dichloroethene	25.00	23.47	94	75-120	9	20	
2,2-Dichloropropane	25.00	23.11	92	72-128	10	24	
Chloroform	25.00	21.71	87	78-120	10	20	
Bromochloromethane	25.00	23.91	96	78-120	8	20	
1,1,1-Trichloroethane	25.00	22.03	88	78-120	10	20	
1,1-Dichloropropene	25.00	22.40	90	75-120	9	21	
Carbon Tetrachloride	25.00	20.82	83	80-120	9	21	
1,2-Dichloroethane	25.00	22.05	88	74-120	7	20	
Benzene	25.00	23.94	96	77-120	8	20	
Trichloroethene	25.00	22.55	90	78-122	8	20	
1,2-Dichloropropane	25.00	23.48	94	76-120	8	20	
Bromodichloromethane	25.00	23.54	94	78-120	8	20	
Dibromomethane	25.00	23.10	92	77-120	6	20	
4-Methyl-2-Pentanone	25.00	21.06	84	65-120	9	22	
cis-1,3-Dichloropropene	25.00	25.15	101	76-120	8	20	
Toluene	25.00	23.57	94	73-120	8	20	
trans-1,3-Dichloropropene	25.00	22.45	90	72-120	8	20	
1,1,2-Trichloroethane	25.00	24.74	99	76-120	6	20	
2-Hexanone	25.00	21.36	85	57-121	8	25	
1,3-Dichloropropane	25.00	24.67	99	75-120	8	20	
Tetrachloroethene	25.00	21.84	87	77-120	7	20	
Dibromochloromethane	25.00	24.11	96	76-120	6	20	
1,2-Dibromoethane	25.00	24.18	97	77-120	7	20	
Chlorobenzene	25.00	23.25	93	78-120	8	20	
1,1,1,2-Tetrachloroethane	25.00	22.98	92	77-120	8	20	
Ethylbenzene	25.00	23.80	95	78-120	8	26	
m,p-Xylenes	50.00	50.05	100	77-120	8	20	
o-Xylene	25.00	24.41	98	77-120	8	20	
Styrene	25.00	25.40	102	77-120	8	20	
Bromoform	25.00	22.34	89	74-121	6	21	
Isopropylbenzene	25.00	21.10	84	71-120	9	20	
1,1,2,2-Tetrachloroethane	25.00	24.05	96	73-120	7	20	
1,2,3-Trichloropropane	25.00	24.15	97	72-120	8	20	
Propylbenzene	25.00	24.78	99	76-120	6	20	
Bromobenzene	25.00	22.56	90	75-120	8	20	

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155043
Units:	ug/L	Analyzed:	09/18/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	23.94	96	77-120	6	20	
2-Chlorotoluene	25.00	24.41	98	76-120	8	20	
4-Chlorotoluene	25.00	24.37	97	78-120	8	20	
tert-Butylbenzene	25.00	23.53	94	76-120	6	21	
1,2,4-Trimethylbenzene	25.00	23.69	95	77-120	4	20	
sec-Butylbenzene	25.00	23.28	93	80-120	4	21	
para-Isopropyl Toluene	25.00	21.62	86	76-120	3	20	
1,3-Dichlorobenzene	25.00	23.58	94	75-120	7	20	
1,4-Dichlorobenzene	25.00	23.56	94	77-120	5	23	
n-Butylbenzene	25.00	25.77	103	76-120	5	21	
1,2-Dichlorobenzene	25.00	23.77	95	76-120	7	20	
1,2-Dibromo-3-Chloropropane	25.00	23.77	95	65-120	9	22	
1,2,4-Trichlorobenzene	25.00	21.23	85	73-121	5	20	
Hexachlorobutadiene	25.00	21.72	87	73-123	6	25	
Naphthalene	25.00	23.46	94	62-121	6	32	
1,2,3-Trichlorobenzene	25.00	22.37	89	66-123	6	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	96	78-120	

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512591	Batch#:	155043
Matrix:	Water	Analyzed:	09/18/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512591	Batch#:	155043
Matrix:	Water	Analyzed:	09/18/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	25.09	100	56-140	
Chloromethane	25.00	24.06	96	46-142	
Vinyl Chloride	25.00	25.18	101	49-136	
Bromomethane	25.00	30.49 b	122	42-154	V3
Chloroethane	25.00	25.43	102	51-133	
Trichlorofluoromethane	25.00	22.49	90	63-135	
Iodomethane	25.00	28.96	116	70-130	
Acetone	25.00	21.26	85	48-130	
1,1-Dichloroethene	25.00	24.39	98	68-133	
Methylene Chloride	25.00	25.20	101	71-120	
Carbon Disulfide	25.00	23.13	93	56-120	
MTBE	25.00	23.53	94	58-120	
trans-1,2-Dichloroethene	25.00	26.34	105	80-120	
Vinyl Acetate	25.00	22.50	90	63-124	
1,1-Dichloroethane	25.00	25.06	100	77-120	
2-Butanone	25.00	22.39	90	57-120	
cis-1,2-Dichloroethene	25.00	24.90	100	75-120	
2,2-Dichloropropane	25.00	24.54	98	72-128	
Chloroform	25.00	22.81	91	78-120	
Bromochloromethane	25.00	25.78	103	78-120	
1,1,1-Trichloroethane	25.00	23.56	94	78-120	
1,1-Dichloropropene	25.00	23.29	93	75-120	
Carbon Tetrachloride	25.00	21.51	86	80-120	
1,2-Dichloroethane	25.00	22.00	88	74-120	
Benzene	25.00	24.80	99	77-120	
Trichloroethene	25.00	23.39	94	78-122	
1,2-Dichloropropane	25.00	23.78	95	76-120	
Bromodichloromethane	25.00	23.44	94	78-120	
Dibromomethane	25.00	23.45	94	77-120	
4-Methyl-2-Pentanone	25.00	20.17	81	65-120	
cis-1,3-Dichloropropene	25.00	25.57	102	76-120	
Toluene	25.00	24.09	96	73-120	
trans-1,3-Dichloropropene	25.00	22.55	90	72-120	
1,1,2-Trichloroethane	25.00	24.65	99	76-120	
2-Hexanone	25.00	19.54 b	78	57-121	V9
1,3-Dichloropropane	25.00	24.55	98	75-120	
Tetrachloroethene	25.00	22.04	88	77-120	
Dibromochloromethane	25.00	23.68	95	76-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	24.06	96	77-120	
Chlorobenzene	25.00	23.61	94	78-120	
1,1,1,2-Tetrachloroethane	25.00	22.87	91	77-120	
Ethylbenzene	25.00	23.81	95	78-120	
m,p-Xylenes	50.00	49.03	98	77-120	
o-Xylene	25.00	23.71	95	77-120	
Styrene	25.00	24.73	99	77-120	
Bromoform	25.00	22.01	88	74-121	
Isopropylbenzene	25.00	21.70	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.17	101	73-120	
1,2,3-Trichloropropane	25.00	25.39	102	72-120	
Propylbenzene	25.00	23.58	94	76-120	
Bromobenzene	25.00	24.49	98	75-120	
1,3,5-Trimethylbenzene	25.00	25.43	102	77-120	
2-Chlorotoluene	25.00	25.33	101	76-120	
4-Chlorotoluene	25.00	24.51	98	78-120	
tert-Butylbenzene	25.00	21.43	86	76-120	
1,2,4-Trimethylbenzene	25.00	26.06	104	77-120	
sec-Butylbenzene	25.00	21.16	85	80-120	
para-Isopropyl Toluene	25.00	22.04	88	76-120	
1,3-Dichlorobenzene	25.00	23.90	96	75-120	
1,4-Dichlorobenzene	25.00	23.54	94	77-120	
n-Butylbenzene	25.00	29.02	116	76-120	
1,2-Dichlorobenzene	25.00	24.16	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.86	95	65-120	
1,2,4-Trichlorobenzene	25.00	23.44	94	73-121	
Hexachlorobutadiene	25.00	20.08	80	73-123	
Naphthalene	25.00	25.89	104	62-121	
1,2,3-Trichlorobenzene	25.00	24.60	98	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	102	78-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	121 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513027

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	27.44	110	56-140	
Chloromethane	<0.2000	25.00	27.59	110	46-142	
Vinyl Chloride	<0.1000	25.00	28.18	113	49-136	
Bromomethane	<0.2000	25.00	33.33 b	133	42-154	V3
Chloroethane	<0.2000	25.00	28.30	113	51-133	
Trichlorofluoromethane	<0.2000	25.00	24.84	99	63-135	
Iodomethane	<2.000	25.00	30.99	124	60-140	
Acetone	<1.000	25.00	22.92	92	48-130	
1,1-Dichloroethene	<0.1000	25.00	27.97	112	68-133	
Methylene Chloride	0.3266	25.00	27.21	108	71-120	
Carbon Disulfide	<0.1000	25.00	26.98	108	56-120	
MTBE	<0.1000	25.00	24.62	98	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	28.94	116	80-120	
Vinyl Acetate	<2.000	25.00	24.66	99	63-124	
1,1-Dichloroethane	<0.1000	25.00	28.24	113	77-120	
2-Butanone	<2.000	25.00	24.62	98	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	26.98	108	75-120	
2,2-Dichloropropane	<0.1000	25.00	28.33	113	72-128	
Chloroform	0.1148	25.00	25.52	102	78-120	
Bromochloromethane	<0.1000	25.00	27.36	109	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	27.42	110	78-120	
1,1-Dichloropropene	<0.1000	25.00	26.74	107	75-120	
Carbon Tetrachloride	<0.1000	25.00	24.70	99	80-120	
1,2-Dichloroethane	<0.1000	25.00	24.03	96	74-120	
Benzene	<0.1000	25.00	26.89	108	77-120	
Trichloroethene	<0.1000	25.00	25.64	103	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.58	102	76-120	
Bromodichloromethane	<0.1000	25.00	24.97	100	78-120	
Dibromomethane	<0.1000	25.00	24.50	98	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.13	85	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	26.66	107	76-120	
Toluene	0.2653	25.00	25.77	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.46	94	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.39	102	76-120	
2-Hexanone	<2.000	25.00	20.07 b	80	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.59	102	75-120	
Tetrachloroethene	<0.1316	25.00	24.31	97	77-120	
Dibromochloromethane	<0.1000	25.00	24.30	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.34	97	77-120	
Chlorobenzene	<0.1000	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.25	97	77-120	
Ethylbenzene	<0.1000	25.00	26.24	105	78-120	
m,p-Xylenes	<0.1594	50.00	53.82	108	77-120	
o-Xylene	<0.1000	25.00	25.77	103	77-120	
Styrene	<0.1000	25.00	26.58	106	77-120	
Bromoform	<0.2000	25.00	22.41	90	74-121	
Isopropylbenzene	<0.1000	25.00	23.65	95	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.09	100	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.03	104	72-120	
Propylbenzene	<0.1000	25.00	26.63	107	76-120	
Bromobenzene	<0.1000	25.00	24.37	97	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.61	106	77-120	
2-Chlorotoluene	<0.1000	25.00	27.05	108	76-120	
4-Chlorotoluene	<0.1000	25.00	26.34	105	78-120	
tert-Butylbenzene	<0.1000	25.00	24.61	98	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.76	107	77-120	
sec-Butylbenzene	<0.1029	25.00	24.42	98	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.42	94	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.18	101	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.68	99	77-120	
n-Butylbenzene	<0.1285	25.00	31.43	126 *	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.19	101	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.00	96	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	23.55	94	73-121	
Hexachlorobutadiene	<0.4000	25.00	22.13	89	73-123	
Naphthalene	<0.4000	25.00	25.49	102	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	24.19	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	27.26	109	56-140	1	24	
Chloromethane	25.00	27.66	111	46-142	0	24	
Vinyl Chloride	25.00	28.73	115	49-136	2	24	
Bromomethane	25.00	32.55 b	130	42-154	2	24	V3
Chloroethane	25.00	27.91	112	51-133	1	25	
Trichlorofluoromethane	25.00	23.79	95	63-135	4	20	
Iodomethane	25.00	32.18	129	60-140	4	30	
Acetone	25.00	23.98	96	48-130	5	41	
1,1-Dichloroethene	25.00	27.76	111	68-133	1	20	
Methylene Chloride	25.00	26.94	106	71-120	1	20	
Carbon Disulfide	25.00	26.28	105	56-120	3	20	
MTBE	25.00	25.07	100	58-120	2	21	
trans-1,2-Dichloroethene	25.00	28.24	113	80-120	2	24	
Vinyl Acetate	25.00	24.61	98	63-124	0	24	
1,1-Dichloroethane	25.00	27.38	110	77-120	3	20	
2-Butanone	25.00	24.07	96	57-120	2	32	
cis-1,2-Dichloroethene	25.00	26.43	106	75-120	2	20	
2,2-Dichloropropane	25.00	27.44	110	72-128	3	24	
Chloroform	25.00	24.72	98	78-120	3	20	
Bromochloromethane	25.00	26.88	108	78-120	2	20	
1,1,1-Trichloroethane	25.00	26.42	106	78-120	4	20	
1,1-Dichloropropene	25.00	26.16	105	75-120	2	21	
Carbon Tetrachloride	25.00	23.90	96	80-120	3	21	
1,2-Dichloroethane	25.00	23.54	94	74-120	2	20	
Benzene	25.00	26.27	105	77-120	2	20	
Trichloroethene	25.00	24.84	99	78-122	3	20	
1,2-Dichloropropane	25.00	25.13	101	76-120	2	20	
Bromodichloromethane	25.00	24.74	99	78-120	1	20	
Dibromomethane	25.00	24.35	97	77-120	1	20	
4-Methyl-2-Pentanone	25.00	21.17	85	65-120	0	22	
cis-1,3-Dichloropropene	25.00	26.38	106	76-120	1	20	
Toluene	25.00	25.38	100	73-120	2	20	
trans-1,3-Dichloropropene	25.00	23.28	93	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.46	102	76-120	0	20	
2-Hexanone	25.00	20.17 b	81	57-121	1	25	V9
1,3-Dichloropropane	25.00	25.43	102	75-120	1	20	
Tetrachloroethene	25.00	23.62	94	77-120	3	20	
Dibromochloromethane	25.00	24.22	97	76-120	0	20	
1,2-Dibromoethane	25.00	24.55	98	77-120	1	20	
Chlorobenzene	25.00	24.47	98	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	23.74	95	77-120	2	20	
Ethylbenzene	25.00	25.52	102	78-120	3	26	
m,p-Xylenes	50.00	52.06	104	77-120	3	20	
o-Xylene	25.00	24.87	99	77-120	4	20	
Styrene	25.00	25.65	103	77-120	4	20	
Bromoform	25.00	21.99	88	74-121	2	21	
Isopropylbenzene	25.00	23.34	93	71-120	1	20	
1,1,2,2-Tetrachloroethane	25.00	25.64	103	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	26.64	107	72-120	2	20	
Propylbenzene	25.00	26.01	104	76-120	2	20	
Bromobenzene	25.00	24.70	99	75-120	1	20	
1,3,5-Trimethylbenzene	25.00	26.85	107	77-120	1	20	
2-Chlorotoluene	25.00	27.09	108	76-120	0	20	
4-Chlorotoluene	25.00	25.94	104	78-120	2	20	
tert-Butylbenzene	25.00	23.48	94	76-120	5	21	
1,2,4-Trimethylbenzene	25.00	26.76	107	77-120	0	20	
sec-Butylbenzene	25.00	23.55	94	80-120	4	21	
para-Isopropyl Toluene	25.00	23.59	94	76-120	1	20	
1,3-Dichlorobenzene	25.00	24.65	99	75-120	2	20	
1,4-Dichlorobenzene	25.00	24.45	98	77-120	1	23	
n-Butylbenzene	25.00	31.68	127 *	76-120	1	21	M1
1,2-Dichlorobenzene	25.00	24.99	100	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	25.12	100	65-120	5	22	
1,2,4-Trichlorobenzene	25.00	23.49	94	73-121	0	20	
Hexachlorobutadiene	25.00	22.28	89	73-123	1	25	
Naphthalene	25.00	26.42	106	62-121	4	32	
1,2,3-Trichlorobenzene	25.00	24.86	99	66-123	3	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214805 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214805 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839376301002 File : kii02 Time : 18-SEP-2009 08:17

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10792	16.91	
75	30% - 60% of mass 95	30637	48.00	
95		63832	100.00	
96	5% - 9% of mass 95	4818	7.55	
173	< 2% of mass 174	196	0.42	
174	> 50% and < 100% of mass 95	47056	73.72	
175	5% - 9% of mass 174	3528	7.50	
176	> 95% and < 101% of mass 174	45185	96.02	
177	5% - 9% of mass 176	2988	6.61	

Analyst: BO Date: 09/18/09 Reviewer: LW Date: 09/21/09

CURTIS & TOMPKINS BFB TUNE FOR 214805 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839382075009 File : kim09 Time : 22-SEP-2009 11:11

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13985	15.86	
75	30% - 60% of mass 95	40908	46.38	
95		88202	100.00	
96	5% - 9% of mass 95	5034	5.71	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	66128	74.97	
175	5% - 9% of mass 174	4773	7.22	
176	> 95% and < 101% of mass 174	64261	97.18	
177	5% - 9% of mass 176	4364	6.79	

Analyst: BO Date: 09/22/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214805 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : 20PPB IDF : 1.0
Seqnum : 839376301003.1 File : kii03 Time : 18-SEP-2009 08:31
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5152	20.00	19.24	ug/L	-4	20	0.0500	
Chloromethane	0.5160	0.4220	20.00	16.36	ug/L	-18	20	0.1000	
Vinyl Chloride	0.5175	0.4781	20.00	18.48	ug/L	-8	20	0.0500	
Bromomethane	0.2608	0.2533	20.00	19.43	ug/L	-3	20	0.0500	
Chloroethane	0.4094	0.3835	20.00	18.74	ug/L	-6	20	0.0500	
Trichlorofluoromethane	0.7415	0.6579	20.00	17.74	ug/L	-11	20	0.0500	
Acetone	0.1382	0.1264	20.00	18.29	ug/L	-9	20	0.0500	
1,1-Dichloroethene	0.3747	0.3790	20.00	20.23	ug/L	1	20	0.0500	
Iodomethane	0.2599	0.2454	20.00	19.53	ug/L	-2	20	0.0500	
Methylene Chloride	0.5280	0.5015	20.00	19.00	ug/L	-5	20	0.0500	
Carbon Disulfide	1.4090	1.4928	20.00	21.19	ug/L	6	20	0.0500	
MTBE	1.5447	1.4576	20.00	18.87	ug/L	-6	20	0.0500	
trans-1,2-Dichloroethene	0.4564	0.4593	20.00	20.13	ug/L	1	20	0.0500	
Vinyl Acetate	0.9726	0.8787	20.00	18.07	ug/L	-10	20	0.0500	
1,1-Dichloroethane	0.9405	0.9328	20.00	19.84	ug/L	-1	20	0.1000	
2-Butanone	0.2331	0.2128	20.00	18.26	ug/L	-9	20	0.0500	
2,2-Dichloropropane	0.7134	0.7385	20.00	20.71	ug/L	4	20	0.0500	
cis-1,2-Dichloroethene	0.5440	0.5328	20.00	19.59	ug/L	-2	20	0.0500	
Chloroform	0.9238	0.8274	20.00	17.91	ug/L	-10	20	0.0500	
Bromochloromethane	0.2354	0.2288	20.00	19.44	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.7032	0.6942	20.00	19.74	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.4217	0.4186	20.00	19.85	ug/L	-1	20	0.0500	
Carbon Tetrachloride	0.3483	0.3328	20.00	19.11	ug/L	-4	20	0.0500	
1,2-Dichloroethane	0.4392	0.3950	20.00	17.99	ug/L	-10	20	0.0500	
Benzene	1.3404	1.3272	20.00	19.80	ug/L	-1	20	0.0500	
Trichloroethene	0.3158	0.3006	20.00	19.04	ug/L	-5	20	0.0500	
1,2-Dichloropropane	0.3595	0.3450	20.00	19.19	ug/L	-4	20	0.0500	
Bromodichloromethane	0.3863	0.3639	20.00	18.84	ug/L	-6	20	0.0500	
Dibromomethane	0.1802	0.1697	20.00	18.84	ug/L	-6	20	0.0500	
4-Methyl-2-Pentanone	0.3044	0.2611	20.00	17.15	ug/L	-14	20	0.0500	
cis-1,3-Dichloropropene	0.5168	0.5013	20.00	19.40	ug/L	-3	20	0.0500	
Toluene	0.9593	0.9400	20.00	19.60	ug/L	-2	20	0.0500	
trans-1,3-Dichloropropene	0.5730	0.5621	20.00	19.62	ug/L	-2	20	0.0500	
1,1,2-Trichloroethane	0.1749	0.1702	20.00	19.46	ug/L	-3	20	0.0500	
2-Hexanone	0.2445	0.2110	20.00	17.26	ug/L	-14	20	0.0500	
1,3-Dichloropropane	0.6133	0.5924	20.00	19.32	ug/L	-3	20	0.0500	
Tetrachloroethene	0.3329	0.3174	20.00	19.07	ug/L	-5	20	0.0500	
Dibromochloromethane	0.3027	0.2831	20.00	18.70	ug/L	-6	20	0.0500	
1,2-Dibromoethane	0.3049	0.2885	20.00	18.92	ug/L	-5	20	0.0500	
Chlorobenzene	1.0519	0.9987	20.00	18.99	ug/L	-5	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3358	0.3106	20.00	18.50	ug/L	-7	20	0.0500	
Ethylbenzene	1.8115	1.7849	20.00	19.71	ug/L	-1	20	0.0500	
m,p-Xylenes	0.6304	0.6481	40.00	41.12	ug/L	3	20	0.0500	
o-Xylene	0.6283	0.6245	20.00	19.88	ug/L	-1	20	0.0500	
Styrene	1.0367	1.0394	20.00	20.05	ug/L	0	20	0.0500	
Bromoform	0.1849	0.1864	20.00	17.78	ug/L	-11	20	0.1000	
Isopropylbenzene	3.8595	3.9139	20.00	20.28	ug/L	1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9126	20.00	19.04	ug/L	-5	20	0.3000	
1,2,3-Trichloropropane	1.0234	0.9788	20.00	19.13	ug/L	-4	20	0.0500	
Propylbenzene	3.9448	4.1399	20.00	20.99	ug/L	5	20	0.0500	
Bromobenzene	1.0220	0.9209	20.00	18.02	ug/L	-10	20	0.0500	
1,3,5-Trimethylbenzene	2.7424	2.7158	20.00	19.81	ug/L	-1	20	0.0500	
2-Chlorotoluene	3.1099	3.0706	20.00	19.75	ug/L	-1	20	0.0500	
4-Chlorotoluene	2.6572	2.6603	20.00	20.02	ug/L	0	20	0.0500	
tert-Butylbenzene	2.1712	2.1471	20.00	19.78	ug/L	-1	20	0.0500	
1,2,4-Trimethylbenzene	2.6384	2.5379	20.00	19.24	ug/L	-4	20	0.0500	
sec-Butylbenzene	3.1284	3.0742	20.00	19.65	ug/L	-2	20	0.0500	
para-Isopropyl Toluene	2.4941	2.3696	20.00	19.00	ug/L	-5	20	0.0500	
1,3-Dichlorobenzene	1.6902	1.6051	20.00	18.99	ug/L	-5	20	0.0500	
1,4-Dichlorobenzene	1.6542	1.5741	20.00	19.03	ug/L	-5	20	0.0500	
n-Butylbenzene	2.4331	2.2973	20.00	20.88	ug/L	4	20	0.0500	
1,2-Dichlorobenzene	1.6119	1.5180	20.00	18.83	ug/L	-6	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1759	0.1672	20.00	19.02	ug/L	-5	20	0.0500	
1,2,4-Trichlorobenzene	1.0876	0.9328	20.00	17.15	ug/L	-14	20	0.0500	
Hexachlorobutadiene	0.4373	0.4100	20.00	18.75	ug/L	-6	20	0.0500	
Naphthalene	2.7279	2.4531	20.00	17.99	ug/L	-10	20	0.0500	
1,2,3-Trichlorobenzene	1.0079	0.8664	20.00	17.19	ug/L	-14	20	0.0500	
Dibromofluoromethane	0.4472	0.4527	50.00	50.61	ug/L	1	20	0.0500	
1,2-Dichloroethane-d4	0.3737	0.3508	50.00	46.94	ug/L	-6	20	0.0500	
Toluene-d8	1.4811	1.5636	50.00	52.78	ug/L	6	20	0.0500	
Bromofluorobenzene	1.2424	1.1986	50.00	48.24	ug/L	-4	20	0.0500	

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1521423	1.07	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	2540856	3.84	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2155323	0.90	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	904792	-8.00	17.10	17.10	0.00

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/21/09

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214805 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513025 IDF : 1.0
Seqnum : 839382075010.2 File : kim10 Time : 22-SEP-2009 11:24
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5374	25.00	25.09	ug/L	0	20	0.0500	u
Chloromethane	0.5160	0.4967	25.00	24.06	ug/L	-4	20	0.1000	u
Vinyl Chloride	0.5175	0.5211	25.00	25.18	ug/L	1	20	0.0500	u
Bromomethane	0.2608	0.3181	25.00	30.49	ug/L	**22**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4165	25.00	25.43	ug/L	2	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6672	25.00	22.49	ug/L	-10	20	0.0500	u
Iodomethane	0.2599	0.3068	25.00	28.96	ug/L	16	20	0.0500	u
Acetone	0.1382	0.1175	25.00	21.26	ug/L	-15	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3656	25.00	24.39	ug/L	-2	20	0.0500	u
Methylene Chloride	0.5280	0.5322	25.00	25.20	ug/L	1	20	0.0500	u
Carbon Disulfide	1.4090	1.3035	25.00	23.13	ug/L	-7	20	0.0500	u
MTBE	1.5447	1.4539	25.00	23.53	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.4808	25.00	26.34	ug/L	5	20	0.0500	u
Vinyl Acetate	0.9726	0.8755	25.00	22.50	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9426	25.00	25.06	ug/L	0	20	0.1000	u
2-Butanone	0.2331	0.2087	25.00	22.39	ug/L	-10	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5420	25.00	24.90	ug/L	0	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7002	25.00	24.54	ug/L	-2	20	0.0500	u
Chloroform	0.9238	0.8427	25.00	22.81	ug/L	-9	20	0.0500	u
Bromochloromethane	0.2354	0.2428	25.00	25.78	ug/L	3	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.6628	25.00	23.56	ug/L	-6	20	0.0500	u
1,1-Dichloropropene	0.4217	0.3928	25.00	23.29	ug/L	-7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.2997	25.00	21.51	ug/L	-14	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3866	25.00	22.00	ug/L	-12	20	0.0500	u
Benzene	1.3404	1.3296	25.00	24.80	ug/L	-1	20	0.0500	u
Trichloroethene	0.3158	0.2955	25.00	23.39	ug/L	-6	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3419	25.00	23.78	ug/L	-5	20	0.0500	u
Bromodichloromethane	0.3863	0.3622	25.00	23.44	ug/L	-6	20	0.0500	u
Dibromomethane	0.1802	0.1690	25.00	23.45	ug/L	-6	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2456	25.00	20.17	ug/L	-19	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5285	25.00	25.57	ug/L	2	20	0.0500	u
Toluene	0.9593	0.9242	25.00	24.09	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5168	25.00	22.55	ug/L	-10	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1725	25.00	24.65	ug/L	-1	20	0.0500	u
2-Hexanone	0.2445	0.1911	25.00	19.54	ug/L	**-22**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.6023	25.00	24.55	ug/L	-2	20	0.0500	u
Tetrachloroethene	0.3329	0.2934	25.00	22.04	ug/L	-12	20	0.0500	u
Dibromochloromethane	0.3027	0.2868	25.00	23.68	ug/L	-5	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2934	25.00	24.06	ug/L	-4	20	0.0500	u
Chlorobenzene	1.0519	0.9935	25.00	23.61	ug/L	-6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3071	25.00	22.87	ug/L	-9	20	0.0500	u
Ethylbenzene	1.8115	1.7256	25.00	23.81	ug/L	-5	20	0.0500	u
m,p-Xylenes	0.6304	0.6182	50.00	49.03	ug/L	-2	20	0.0500	u
o-Xylene	0.6283	0.5958	25.00	23.71	ug/L	-5	20	0.0500	u
Styrene	1.0367	1.0254	25.00	24.73	ug/L	-1	20	0.0500	u
Bromoform	0.1849	0.1874	25.00	22.01	ug/L	-12	20	0.1000	u
Isopropylbenzene	3.8595	3.3494	25.00	21.70	ug/L	-13	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9652	25.00	25.17	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0393	25.00	25.39	ug/L	2	20	0.0500	u
Propylbenzene	3.9448	3.7203	25.00	23.58	ug/L	-6	20	0.0500	u
Bromobenzene	1.0220	1.0012	25.00	24.49	ug/L	-2	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.7898	25.00	25.43	ug/L	2	20	0.0500	u
2-Chlorotoluene	3.1099	3.1506	25.00	25.33	ug/L	1	20	0.0500	u
4-Chlorotoluene	2.6572	2.6050	25.00	24.51	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.8614	25.00	21.43	ug/L	-14	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7503	25.00	26.06	ug/L	4	20	0.0500	u
sec-Butylbenzene	3.1284	2.6477	25.00	21.16	ug/L	-15	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.1983	25.00	22.04	ug/L	-12	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6155	25.00	23.90	ug/L	-4	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5576	25.00	23.54	ug/L	-6	20	0.0500	u
n-Butylbenzene	2.4331	2.3610	25.00	29.02	ug/L	16	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.5576	25.00	24.16	ug/L	-3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1679	25.00	23.86	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.0197	25.00	23.44	ug/L	-6	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3513	25.00	20.08	ug/L	-20	20	0.0500	u
Naphthalene	2.7279	2.8247	25.00	25.89	ug/L	4	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9918	25.00	24.60	ug/L	-2	20	0.0500	u
Dibromofluoromethane	0.4472	0.4622	50.00	51.68	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3432	50.00	45.92	ug/L	-8	20	0.0500	u
Toluene-d8	1.4811	1.5568	50.00	52.55	ug/L	5	20	0.0500	u
Bromofluorobenzene	1.2424	1.2647	50.00	50.90	ug/L	2	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1771090	17.66	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3063159	25.18	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2626334	22.95	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1004184	2.11	17.10	17.10	0.00

BO 09/22/09 : Standard ID fixed in LIMS [general version]

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839376301

Date : 09/18/09 Reference : kif12
Sequence : MSVOA11 kii Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
003	CCV	20PPB	1521423	10.81	2540856	11.74	2155323	14.82	904792	17.10
004	BS	QC512589	1540120	10.81	2599684	11.74	2219012	14.82	915904	17.10
005	BSD	QC512590	1631536	10.81	2735204	11.74	2340674	14.82	967326	17.10
007	BLANK	QC512591	1573015	10.81	2655830	11.74	2192840	14.82	702894	17.10
008	SAMPLE	214724-002	1504837	10.81	2557434	11.74	2116796	14.82	684627	17.10
009	SAMPLE	214724-001	1464660	10.81	2522298	11.74	2113508	14.82	773119	17.10
010	SAMPLE	214941-004	1643438	10.81	2812420	11.74	2319156	14.82	733603	17.10
011	SAMPLE	214942-003	1560344	10.81	2645976	11.74	2174303	14.82	628138	17.10
012	SAMPLE	214943-003	1508988	10.81	2573325	11.74	2103648	14.82	576196	17.10
013	SAMPLE	214933-005	1474577	10.81	2504599	11.74	2081524	14.82	651687	17.10
014	SAMPLE	214805-001	1435807	10.81	2458051	11.74	2025743	14.82	566095	17.10
015	SAMPLE	214805-002	1400039	10.81	2403963	11.74	1993574	14.82	595567	17.10
016	SAMPLE	214805-003	1378423	10.81	2368635	11.74	1972575	14.82	595529	17.10
017	SAMPLE	214805-004	1381421	10.81	2355508	11.74	1931687	14.82	530701	17.10
018	SAMPLE	214805-005	1334001	10.81	2296712	11.74	1905613	14.82	568144	17.10
019	SAMPLE	214805-006	1323386	10.81	2268225	11.74	1875076	14.82	544551	17.10
020	SAMPLE	214805-008	1283667	10.81	2212522	11.74	1854532	14.82	587248	17.10
021	SAMPLE	214941-001	1291308	10.81	2227785	11.74	1841943	14.82	525068	17.10
022	SAMPLE	214941-002	1291598	10.81	2211616	11.74	1836600	14.82	509516	17.10
023	SAMPLE	214941-003	1287305	10.81	2220950	11.74	1847023	14.82	552102	17.10
024	SAMPLE	214942-001	1274348	10.81	2197304	11.74	1836789	14.82	560532	17.10
026	SAMPLE	214943-001	1252877	10.81	2172875	11.74	1826582	14.82	534816	17.10
027	SAMPLE	214943-002	1251904	10.81	2160524	11.74	1806659	14.82	530543	17.10
031	SAMPLE	214824-001	1235844	10.81	2138186	11.74	1797435	14.82	577877	17.10
032	SAMPLE	214824-002	1246900	10.81	2170168	11.74	1825533	14.82	568413	17.10
033	SAMPLE	214824-003	1232281	10.81	2132404	11.74	1784162	14.82	553009	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839382075

Date : 09/22/09 Reference : kif12
Sequence : MSVOA11 kim Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
010	CCV/LCS	QC513025	1771090	10.81	3063159	11.74	2626334	14.82	1004184	17.10
012	BLANK	QC513026	1677689	10.81	2938196	11.74	2420292	14.82	683430	17.10
013	MSS	214805-007	1627599	10.81	2892984	11.74	2404486	14.82	690720	17.10
014	SAMPLE	214805-009	1565529	10.81	2757761	11.74	2302025	14.82	604953	17.10
015	SAMPLE	214804-009	1505672	10.81	2669448	11.74	2197601	14.82	618082	17.10
016	SAMPLE	214804-011	1472585	10.81	2635877	11.74	2197171	14.82	646353	17.10
017	MS	QC513027	1510323	10.81	2678148	11.74	2313548	14.82	929714	17.10
018	MSD	QC513028	1575123	10.81	2772606	11.74	2395237	14.82	921218	17.10
020	SAMPLE	214846-004	1562873	10.81	2775408	11.74	2321901	14.82	639407	17.10
021	SAMPLE	214846-011	1507399	10.81	2695223	11.74	2258483	14.82	634750	17.10
022	SAMPLE	214846-001	1500905	10.81	2683520	11.74	2225923	14.82	602925	17.10
023	SAMPLE	214846-002	1479800	10.81	2643433	11.74	2219182	14.82	643099	17.10
024	SAMPLE	214850-001	1460536	10.81	2646196	11.74	2223363	14.82	624455	17.10
025	SAMPLE	214850-002	1443304	10.81	2599314	11.74	2166147	14.82	617441	17.10
026	SAMPLE	214850-003	1431257	10.81	2579824	11.74	2159311	14.82	628643	17.10
027	SAMPLE	214850-004	1390945	10.82	2516509	11.74	2125898	14.82	623666	17.10
028	SAMPLE	214850-005	1370408	10.81	2496229	11.74	2075026	14.82	571800	17.10
029	SAMPLE	214850-007	1364380	10.81	2450761	11.74	2057537	14.82	614715	17.10
030	SAMPLE	214850-008	1349570	10.81	2433732	11.74	2056869	14.82	584289	17.10
031	SAMPLE	214850-009	1286875	10.81	2337019	11.74	1964124	14.82	556855	17.10
032	SAMPLE	214850-010	1308540	10.81	2376141	11.74	2004063	14.82	588911	17.10
033	SAMPLE	214850-011	1292398	10.82	2344962	11.74	1986998	14.82	557910	17.10
034	SAMPLE	214850-012	1301082	10.81	2360769	11.74	2003780	14.82	583821	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839376301

Instrument : MSVOA11 Begun : 09/18/09 07:41
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kii01	X	IB			09/18/09 07:41	1.0	1
002	kii02	TUN	BFB			09/18/09 08:17	1.0	2
003	kii03	CCV	20PPB			09/18/09 08:31	1.0	3 4 5 6 1
004	kii04	BS	QC512589	Water	155043	09/18/09 09:09	1.0	7 8 9 10 1
005	kii05	BSD	QC512590	Water	155043	09/18/09 09:38	1.0	7 8 9 10 1
006	kii06	X	IB			09/18/09 10:06	1.0	1
007	kii07	BLANK	QC512591	Water	155043	09/18/09 10:34	1.0	1
008	kii08	SAMPLE	214724-002	Water	155043	09/18/09 11:02	1.0	1
009	kii09	SAMPLE	214724-001	Water	155043	09/18/09 11:31	1.0	1
010	kii10	SAMPLE	214941-004	Water	155043	09/18/09 11:59	1.0	1
011	kii11	SAMPLE	214942-003	Water	155043	09/18/09 12:28	1.0	1
012	kii12	SAMPLE	214943-003	Water	155043	09/18/09 12:56	1.0	1
013	kii13	SAMPLE	214933-005	Water	155043	09/18/09 13:24	1.0	1
014	kii14	SAMPLE	214805-001	Water	155043	09/18/09 13:52	1.0	1
015	kii15	SAMPLE	214805-002	Water	155043	09/18/09 14:21	1.0	1
016	kii16	SAMPLE	214805-003	Water	155043	09/18/09 14:49	1.0	1
017	kii17	SAMPLE	214805-004	Water	155043	09/18/09 15:18	1.0	1
018	kii18	SAMPLE	214805-005	Water	155043	09/18/09 15:46	1.0	1
019	kii19	SAMPLE	214805-006	Water	155043	09/18/09 16:14	1.0	1
020	kii20	SAMPLE	214805-008	Water	155043	09/18/09 16:42	1.0	1
021	kii21	SAMPLE	214941-001	Water	155043	09/18/09 17:11	1.0	1
022	kii22	SAMPLE	214941-002	Water	155043	09/18/09 17:42	1.0	1
023	kii23	SAMPLE	214941-003	Water	155043	09/18/09 18:10	1.0	1
024	kii24	SAMPLE	214942-001	Water	155043	09/18/09 18:38	1.0	1
025	kii25	X	214942-002		155043	09/18/09 19:07	1.0	1
026	kii26	SAMPLE	214943-001	Water	155043	09/18/09 19:35	1.0	1
027	kii27	SAMPLE	214943-002	Water	155043	09/18/09 20:03	1.0	1
028	kii28	X	IB			09/18/09 20:31	1.0	1
029	kii29	X	IB			09/18/09 21:00	1.0	1
030	kii30	X	IB			09/18/09 21:28	1.0	1
031	kii31	SAMPLE	214824-001	Water	155048	09/18/09 21:56	1.0	1
032	kii32	SAMPLE	214824-002	Water	155048	09/18/09 22:25	1.0	1
033	kii33	SAMPLE	214824-003	Water	155048	09/18/09 22:53	1.0	1

BO 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

BO 09/21/09 : Matrix spikes were not performed for this analysis in batch 155043 due to insufficient sample amount.

BO 09/21/09 : 214942-002 cancelled

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/21/09

Standards used: 1=S12947 2=S12404 3=S12733 4=S12773 5=S12217 6=S12634 7=S12589 8=S12845 9=S12693 10=S12923

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839382075

Instrument : MSVOA11 Begun : 09/22/09 07:55
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kim01	X	IB			09/22/09 07:55	1.0	1	
002	kim02	X	BFB			09/22/09 08:22	1.0	2	
003	kim03	X	QC513025	Water	155153	09/22/09 08:36	1.0	3 4 5 6 1	
004	kim04	X	BFB			09/22/09 09:14	1.0	2	
005	kim05	X	BFB			09/22/09 09:25	1.0	2	
006	kim06	X	25PPB			09/22/09 09:38	1.0	7 8 9 10 1	
007	kim07	X	QC513025	Water	155153	09/22/09 10:15	1.0	3 4 5 6 1	
008	kim08	X	IB			09/22/09 10:43	1.0	1	
009	kim09	TUN	BFB			09/22/09 11:11	1.0	2	
010	kim10	CCV/LCS	QC513025	Water	155153	09/22/09 11:24	1.0	11 4 5 6 1	
011	kim11	X	IB			09/22/09 11:53	1.0	1	
012	kim12	BLANK	QC513026	Water	155153	09/22/09 12:21	1.0	1	
013	kim13	MSS	214805-007	Water	155153	09/22/09 12:49	1.0	1	
014	kim14	SAMPLE	214805-009	Water	155153	09/22/09 13:18	1.0	1	
015	kim15	SAMPLE	214804-009	Water	155153	09/22/09 13:46	1.0	1	
016	kim16	SAMPLE	214804-011	Water	155153	09/22/09 14:14	1.0	1	
017	kim17	MS	QC513027	Water	155153	09/22/09 14:43	1.0	1 11 4 5 6	
018	kim18	MSD	QC513028	Water	155153	09/22/09 15:11	1.0	1 11 4 5 6	
019	kim19	X	IB			09/22/09 15:39	1.0	1	
020	kim20	SAMPLE	214846-004	Water	155153	09/22/09 16:08	1.0	1	
021	kim21	SAMPLE	214846-011	Water	155153	09/22/09 16:36	1.0	1	
022	kim22	SAMPLE	214846-001	Water	155153	09/22/09 17:04	1.0	1	
023	kim23	SAMPLE	214846-002	Water	155153	09/22/09 17:32	1.0	1	
024	kim24	SAMPLE	214850-001	Water	155153	09/22/09 18:01	1.0	1	
025	kim25	SAMPLE	214850-002	Water	155153	09/22/09 18:29	1.0	1	
026	kim26	SAMPLE	214850-003	Water	155153	09/22/09 18:57	1.0	1	
027	kim27	SAMPLE	214850-004	Water	155153	09/22/09 19:26	1.0	1	
028	kim28	SAMPLE	214850-005	Water	155153	09/22/09 19:54	1.0	1	
029	kim29	SAMPLE	214850-007	Water	155153	09/22/09 20:22	1.0	1	
030	kim30	SAMPLE	214850-008	Water	155153	09/22/09 20:50	1.0	1	
031	kim31	SAMPLE	214850-009	Water	155153	09/22/09 21:19	1.0	1	
032	kim32	SAMPLE	214850-010	Water	155153	09/22/09 21:47	1.0	1	
033	kim33	SAMPLE	214850-011	Water	155153	09/22/09 22:15	1.0	1	
034	kim34	SAMPLE	214850-012	Water	155153	09/22/09 22:44	2.0	1	
035	kim35	X	IB			09/22/09 23:12	1.0	1	
036	kim36	X	IB			09/22/09 23:40	1.0	1	
037	kim37	X	IB			09/23/09 00:08	1.0	1	
038	kim38	X	IB			09/23/09 00:37	1.0	1	
039	kim39	X	IB			09/23/09 01:05	1.0	1	

BO 09/22/09 : KIM10, used new alliquot of standard

BO 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923 7=S12733 8=S12773 9=S12217 10=S12634 11=S12996

GC/MS VOLATILE ORGANICS

Batch #: 155043

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214724 - 1	B	<2		19		11	1x hold 9/18	
2	-2	A						TB	
3	214941 - 1				4			1x	
4	-2								
5	-3								
6	-4			LV				TB	
7	214942 - 1							1x	
8	-2								
9	-3			LV				TB	
10	214943 - 1							1x	
11	-2							1x	
12	-3			LV				TB	
13	214933 - 5	A		LV				TB	
14	214805 - 1	A		LV	20			1x TB	
15	-2								
16	-3								
17	-4								
18	-5								
19	-6								
20	-8								
21									
22									
23									
24									
25									
26	214824 - 1	A	<2	LV			11	Stored BKS	
27	-2								
28	-3								
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155153

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214846-4	B	<2		1		11	mm 1x, 5mm ↑	
2	-11	C						mm 1x, 1+C co	
3	-1	A						TB	
4	-2							1x	
5	214850-1	A	<2		3				
6	-2								
7	-3								
8	-4								
9	-5								
10	-6							MSS PUT OFF	
11	-6							MS/MSD	
12	-7	A	<2						
13	-8								
14	-9								
15	-10								
16	-11								
17	-12					3		2x ~~PUT OFF~~	
18	-13							1x PUT OFF	
19	-14							1x	
20	-15							2x	
21	-16							1x PUT OFF	
22	214805-9	A	<2					mm 1x, 12DCA ↑, hold 9/22	
23	214804-9	A						mm 1x, 12DCA↑, hold 9/22	
24	214805-7	A						MSS 1x	
25	214805-7	BHI						MS/MSD 1x	
26	214804-11	A						mm 1x, 12DCA↑ hold 9/22	
27									
28									
29									
30									
31									
32									
33									
34									
35									

Laboratory Job Number 214805

ANALYTICAL REPORT

Metals

Matrix: Water

Curtis & Tompkins, Ltd.

Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Nickel	Batch#:	154935
Field ID:	PL-102A-9C1	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Prepared:	09/15/09
Diln Fac:	5.000	Analyzed:	09/16/09

Type	Lab ID	Result	RL	ADEQ Flags
SAMPLE	214805-006	48	1.0	
BLANK	QC512147	ND	1.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Nickel	Batch#:	154935
Field ID:	ZZZZZZZZZZ	Sampled:	09/09/09
MSS Lab ID:	214799-003	Received:	09/11/09
Matrix:	Water	Prepared:	09/15/09
Units:	ug/L	Analyzed:	09/16/09
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC512148		100.0	98.15	98	89-120			
BSD	QC512149		100.0	96.80	97	89-120	1	20	
MS	QC512150	4.361	100.0	98.45	94	84-120			
MSD	QC512151		100.0	98.20	94	84-120	0	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Nickel	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	154935
MSS Lab ID:	214799-003	Sampled:	09/09/09
Lab ID:	QC512152	Received:	09/11/09
Matrix:	Water	Analyzed:	09/16/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
4.361	1.000	2.155 J	2.792	NC	10	E4

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Analyte:	Nickel	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Post Digest Spike	Batch#:	154935
MSS Lab ID:	214799-003	Sampled:	09/09/09
Lab ID:	QC512153	Received:	09/11/09
Matrix:	Water	Analyzed:	09/16/09

MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
4.361	500.0	446.9	88	75-125	

REPORTING SUMMARY FOR 214805 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	NI	
214805-006	MET16	09/16/09 19:47	5.0	+	
QC512147	MET16	09/16/09 15:31	5.0	+	
QC512148	MET16	09/16/09 17:08	5.0	+	
QC512149	MET16	09/16/09 17:20	5.0	+	
QC512150	MET16	09/16/09 17:54	5.0	+	
QC512151	MET16	09/16/09 18:05	5.0	+	
QC512152	MET16	09/16/09 17:42	25.0	+	
QC512153	MET16	09/16/09 18:16	5.0	+	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899373591

Instrument : MET16 Begun : 09/16/09 10:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i16k00001	TUN				09/16/09 10:31	1.0	1	
002	09i16k00002	X	RINSE			09/16/09 10:37	1.0	2	
003	09i16k00003	ICALBLK	CALBLANK			09/16/09 10:49	1.0	2	
004	09i16k00004	ICAL				09/16/09 11:00	1.0	3 2	
005	09i16k00005	ICAL				09/16/09 11:11	1.0	4 2	
006	09i16k00006	ICAL				09/16/09 11:23	1.0	5 2	
007	09i16k00007	ICAL				09/16/09 11:34	1.0	6 2	
008	09i16k00008	ICAL				09/16/09 11:45	1.0	7 2	
009	09i16k00009	ICAL				09/16/09 11:56	1.0	8 2	
010	09i16k00010	ICV				09/16/09 12:08	1.0	9 2	
011	09i16k00011	ICB				09/16/09 12:19	1.0	2	
012	09i16k00012	ICSA				09/16/09 12:28	1.0	10 2	7:CA=350000
013	09i16k00013	ICSAB				09/16/09 12:39	1.0	11 2	10:CA=330000
014	09i16k00014	X	RINSE			09/16/09 12:51	1.0	2	
015	09i16k00015	X	RINSE			09/16/09 13:03	1.0	2	
016	09i16k00016	BLANK	QC511922	Soil	154882	09/16/09 13:14	25.0	2	
017	09i16k00017	SER	QC511155	Soil	154680	09/16/09 13:26	125.0	2	
018	09i16k00018	BS	QC510930	Filtrate	154625	09/16/09 13:37	5.0	2	
019	09i16k00019	BSD	QC510931	Filtrate	154625	09/16/09 13:48	5.0	2	
020	09i16k00020	SAMPLE	214584-025	Soil	154932	09/16/09 14:00	25.0	2	1:MN=200
021	09i16k00021	SAMPLE	214584-025	Soil	154932	09/16/09 14:11	250.0	2	
022	09i16k00022	CCV				09/16/09 14:22	1.0	12 2	
023	09i16k00023	CCB				09/16/09 14:34	1.0	2	
024	09i16k00024	ICSA				09/16/09 14:45	1.0	10 2	7:CA=350000
025	09i16k00025	ICSAB				09/16/09 14:56	1.0	11 2	10:CA=330000
026	09i16k00026	X	RINSE			09/16/09 15:08	1.0	2	
027	09i16k00027	X	RINSE			09/16/09 15:19	1.0	2	
028	09i16k00028	BLANK	QC512147	Water	154935	09/16/09 15:31	5.0	2	
029	09i16k00029	MSS	214757-001	Soil	154932	09/16/09 15:39	250.0	2	
030	09i16k00030	SER	QC512131	Soil	154932	09/16/09 15:46	1250	2	
031	09i16k00031	PDS	QC512132	Soil	154932	09/16/09 15:54	250.0	13 14 2	
032	09i16k00032	CCV				09/16/09 16:04	1.0	12 2	
033	09i16k00033	CCB				09/16/09 16:14	1.0	2	
034	09i16k00034	ICSA				09/16/09 16:20	1.0	10 2	7:CA=350000
035	09i16k00035	ICSAB				09/16/09 16:28	1.0	11 2	10:CA=330000
036	09i16k00036	X	RINSE			09/16/09 16:34	1.0	2	
037	09i16k00037	X	RINSE			09/16/09 16:45	1.0	2	
038	09i16k00038	X	RINSE			09/16/09 16:57	1.0	2	
039	09i16k00039	BS	QC512148	Water	154935	09/16/09 17:08	5.0	2	
040	09i16k00040	BSD	QC512149	Water	154935	09/16/09 17:20	5.0	2	
041	09i16k00041	MSS	214799-003	Water	154935	09/16/09 17:31	5.0	2	1:NA=86000
042	09i16k00042	SER	QC512152	Water	154935	09/16/09 17:42	25.0	2	
043	09i16k00043	MS	QC512150	Water	154935	09/16/09 17:54	5.0	2	1:NA=93000
044	09i16k00044	MSD	QC512151	Water	154935	09/16/09 18:05	5.0	2	1:NA=91000
045	09i16k00045	PDS	QC512153	Water	154935	09/16/09 18:16	5.0	13 14 2	
046	09i16k00046	SAMPLE	214800-001	Water	154935	09/16/09 18:28	5.0	2	1:NA=77000
047	09i16k00047	CCV				09/16/09 18:39	1.0	12 2	
048	09i16k00048	CCB				09/16/09 18:50	1.0	2	
049	09i16k00049	X				09/16/09 19:02	1.0	2	
050	09i16k00050	SAMPLE	214801-001	Water	154935	09/16/09 19:13	5.0	2	1:NA=330000
051	09i16k00051	SAMPLE	214801-002	Water	154935	09/16/09 19:24	5.0	2	1:NA=88000
052	09i16k00052	SAMPLE	214804-005	Water	154935	09/16/09 19:36	5.0	2	1:NA=36000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899373591

Instrument : MET16 Begun : 09/16/09 10:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i16k00053	SAMPLE	214805-006	Water	154935	09/16/09 19:47	5.0	2	2:NA=26000
054	09i16k00054	CCV				09/16/09 19:59	1.0	12 2	
055	09i16k00055	CCB				09/16/09 20:10	1.0	2	
056	09i16k00056	X				09/16/09 20:21	1.0	2	
057	09i16k00057	ICSA				09/16/09 20:33	1.0	10 2	7:CA=350000
058	09i16k00058	ICSAB				09/16/09 20:44	1.0	11 2	10:CA=330000
059	09i16k00059	X	RINSE			09/16/09 20:56	1.0	2	
060	09i16k00060	X	RINSE			09/16/09 21:07	1.0	2	
061	09i16k00061	X	RINSE			09/16/09 21:18	1.0	2	

JYF 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 58.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899373591

Date : 09/16/09 Reference : 09i16k00003
Sequence : MET16 09i16k00 Analyzed : 09/16/09 10:49

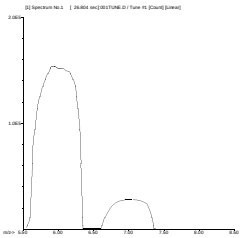
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1573174	1231106	24365	535503	118071	15688	1824394	2493311	1630607	3177227
		LOWER LIMIT	471952	369332	7310	160651	35421	4706	547318	747993	489182	953168
		UPPER LIMIT	1887809	1477327	29238	642604	141685	18826	2189273	2991973	1956728	3812672
011	ICB		1570344	1202664	24459	543553	120285	15955	1727093	2368326	1550813	3003007
012	ICSA		1331796	1112779	26495	534830	107903	15686	1520801	1926482	1482286	2850059
013	ICSAB		1345262	1143494	26353	522719	107574	15789	1580059	1983492	1524916	2941182
016	BLANK	QC511922	1526667	1181266	23903	498040	113560	15785	1802053	2503342	1592329	3127315
017	SER	QC511155	1498049	1178537	23723	499843	112292	15488	1741066	2435451	1581529	3081577
018	BS	QC510930	1501002	1187398	24336	505875	113846	15988	1752251	2436348	1569294	3088796
019	BSD	QC510931	1506798	1176845	24042	510246	114776	15863	1751330	2430396	1569635	3075823
020	SAMPLE	214584-025	1533229	1258807	23925	533619	114823	15276	1758920	2432721	1674278	3114296
021	SAMPLE	214584-025	1538053	1224295	25586	532806	119167	16479	1778695	2459943	1604905	3109050
022	CCV		1542466	1242225	26294	542005	118701	16451	1744599	2353000	1603500	3087926
023	CCB		1510284	1187080	24941	525315	118083	16395	1735798	2404750	1567413	3025996
024	ICSA		1317233	1135392	27090	519892	108022	16365	1552391	1980525	1517497	2914472
025	ICSAB		1343886	1161315	26869	502437	106343	16087	1613421	2038344	1580939	3024354
028	BLANK	QC512147	1461345	1149446	23348	463040	111337	16138	1798401	2529359	1590134	3135596
029	MSS	214757-001	1511255	1194814	24049	496131	113752	15968	1807247	2528054	1617008	3142113
030	SER	QC512131	1519913	1193752	24771	495933	113546	16420	1838506	2533408	1636281	3175790
031	PDS	QC512132	1508955	1217365	25086	502225	112045	16192	1755964	2388925	1617276	3153568
032	CCV		1516584	1216802	25705	509984	114592	16708	1745673	2359441	1598805	3089799
033	CCB		1539854	1210070	24640	501576	115153	16281	1802100	2470732	1615839	3108923
034	ICSA		1320435	1148090	26979	505602	106247	16351	1604049	2015924	1558875	2970965
035	ICSAB		1364068	1179487	26475	486274	104446	16103	1650314	2073105	1607587	3085712
039	BS	QC512148	1448139	1147726	23215	439194	106430	16124	1791885	2561873	1615124	3218689
040	BSD	QC512149	1450880	1144085	23111	445831	106775	15995	1797331	2536602	1601357	3196878
041	MSS	214799-003	1420096	1156225	23502	450386	108817	16279	1748015	2389530	1579366	3130319
042	SER	QC512152	1480062	1188179	23694	464258	109296	16176	1806988	2493071	1606755	3165524
043	MS	QC512150	1411469	1166359	23572	451210	107295	15918	1731275	2348964	1579942	3111444
044	MSD	QC512151	1434359	1159514	23765	451643	108259	16363	1728095	2341182	1576835	3079156
045	PDS	QC512153	1454211	1195555	24300	453569	106183	16371	1717973	2318909	1586484	3098942
046	SAMPLE	214800-001	1452933	1174349	24111	448311	108803	16487	1748264	2376118	1599353	3097982
047	CCV		1558371	1265265	25478	469117	106498	16603	1802631	2412406	1658651	3177406
048	CCB		1559018	1241060	24673	453789	105813	16365	1843795	2487549	1651656	3168161
050	SAMPLE	214801-001	1457794	1185818	25058	441969	102407	16286	1716937	2226037	1588612	3039843
051	SAMPLE	214801-002	1473548	1193994	24304	439977	105839	16701	1759363	2404067	1608013	3139334
052	SAMPLE	214804-005	1461411	1176395	24046	427335	102939	16516	1756894	2407428	1607447	3142662
053	SAMPLE	214805-006	1465001	1167996	24100	426252	102509	16591	1773525	2413523	1586982	3119894
054	CCV		1580629	1273316	26133	452231	102828	16848	1829838	2446816	1692000	3214482
055	CCB		1650456	1309635	25109	449123	103990	16822	1960185	2651692	1777690	3373128
057	ICSA		1373298	1195691	27642	442424	94130	16770	1681206	2086627	1635005	3097068
058	ICSAB		1387210	1209688	27346	423998	92248	16750	1713591	2148258	1694312	3193079

MET16 QC Tune Report

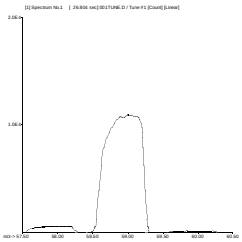
Data File: C:\ICPCHEM\1\DATA\09I16k00.B\001TUNE.D
Date Acquired: Sep 16 2009 10:31 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

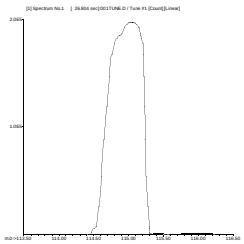
Element	Actual	Required	Flag
7 Li	0.85	5.00	
59 Co	0.92	5.00	
115 In	0.52	5.00	
205 Tl	0.30	5.00	



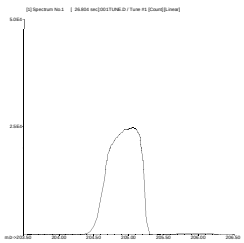
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 METALS Water: EPA 6020

Inst : MET16 Reviewer : ---
Calnum : 899373591001 Date : 16-SEP-2009 10:49
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i16k00004	899373591004		16-SEP-2009 11:00	S12854, S12847
L2	09i16k00005	899373591005		16-SEP-2009 11:11	S12855, S12847
L3	09i16k00006	899373591006		16-SEP-2009 11:23	S12856, S12847
L4	09i16k00007	899373591007		16-SEP-2009 11:34	S12857, S12847
L5	09i16k00008	899373591008		16-SEP-2009 11:45	S12852, S12847
L6	09i16k00009	899373591009		16-SEP-2009 11:56	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Nickel	E	0.0613	0.0310	0.0262	0.0210	0.0197	0.0192	BLNK	-0.1516	51.9195		0.0297	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Nickel	E	0.100	67	0.500	31	1.000	21	10.00	7	100.0	2	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214805 METALS Water
EPA 6020

Inst : MET16
Calnum : 899373591001 Cal Date : 16-SEP-2009

ICV 899373591010 (09i16k00010 16-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Nickel	E	100.0	103.1	ug/L	3	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591011 File : 09i16k00011 Time : 16-SEP-2009 12:19
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	E	ND	0.1000	0.07446	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1570344	-0.18
Scandium	A	1231106	1202664	-2.31
Scandium	E	24365	24459	0.39
Scandium	H	535503	543553	1.50
Germanium	H	118071	120285	1.88
Germanium	E	15688	15955	1.70
Indium	A	1824394	1727093	-5.33
Bismuth	A	2493311	2368326	-5.01
Yttrium	A	1630607	1550813	-4.89
Terbium	A	3177227	3003007	-5.48

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591022 File : 09i16k00022 Time : 16-SEP-2009 14:22
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	0.0297	0.0192	100.0	99.40	ug/L	-1	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1542466	-1.95
Scandium	A	1231106	1242225	0.90
Scandium	E	24365	26294	7.92
Scandium	H	535503	542005	1.21
Germanium	H	118071	118701	0.53
Germanium	E	15688	16451	4.86
Indium	A	1824394	1744599	-4.37
Bismuth	A	2493311	2353000	-5.63
Yttrium	A	1630607	1603500	-1.66
Terbium	A	3177227	3087926	-2.81

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591023 File : 09i16k00023 Time : 16-SEP-2009 14:34
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	E	ND	0.1000	0.07446	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1510284	-4.00
Scandium	A	1231106	1187080	-3.58
Scandium	E	24365	24941	2.36
Scandium	H	535503	525315	-1.90
Germanium	H	118071	118083	0.01
Germanium	E	15688	16395	4.51
Indium	A	1824394	1735798	-4.86
Bismuth	A	2493311	2404750	-3.55
Yttrium	A	1630607	1567413	-3.88
Terbium	A	3177227	3025996	-4.76

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591024 File : 09i16k00024 Time : 16-SEP-2009 14:45
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Nickel	E	4.101	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	119700	ug/L	120
Calcium	A	300000	354400	ug/L	118
Magnesium	A	100000	115200	ug/L	115
Molybdenum	A	2000	2510	ug/L	126
Potassium	A	100000	118900	ug/L	119
Sodium	E	250000	285100	ug/L	114
Iron	H	250000	285600	ug/L	114

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1317233	-16.27
Scandium	A	1231106	1135392	-7.77
Scandium	E	24365	27090	11.18
Scandium	H	535503	519892	-2.92
Germanium	H	118071	108022	-8.51
Germanium	E	15688	16365	4.32
Indium	A	1824394	1552391	-14.91
Bismuth	A	2493311	1980525	-20.57
Yttrium	A	1630607	1517497	-6.94
Terbium	A	3177227	2914472	-8.27

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591025 File : 09i16k00025 Time : 16-SEP-2009 14:56
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	200.0	188.3	ug/L	-6	20	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	535503	502437	-6.17
Scandium	A	1231106	1161315	-5.67
Scandium	E	24365	26869	10.28
Germanium	H	118071	106343	-9.93
Germanium	E	15688	16087	2.54
Indium	A	1824394	1613421	-11.56
Yttrium	A	1630607	1580939	-3.05

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591032 File : 09i16k00032 Time : 16-SEP-2009 16:04
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	0.0297	0.0194	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1516584	-3.60
Scandium	A	1231106	1216802	-1.16
Scandium	E	24365	25705	5.50
Scandium	H	535503	509984	-4.77
Germanium	H	118071	114592	-2.95
Germanium	E	15688	16708	6.50
Indium	A	1824394	1745673	-4.31
Bismuth	A	2493311	2359441	-5.37
Yttrium	A	1630607	1598805	-1.95
Terbium	A	3177227	3089799	-2.75

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591033 File : 09i16k00033 Time : 16-SEP-2009 16:14
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	E	ND	0.1000	0.07446	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1539854	-2.12
Scandium	A	1231106	1210070	-1.71
Scandium	E	24365	24640	1.13
Scandium	H	535503	501576	-6.34
Germanium	H	118071	115153	-2.47
Germanium	E	15688	16281	3.78
Indium	A	1824394	1802100	-1.22
Bismuth	A	2493311	2470732	-0.91
Yttrium	A	1630607	1615839	-0.91
Terbium	A	3177227	3108923	-2.15

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591034 File : 09i16k00034 Time : 16-SEP-2009 16:20
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Nickel	E	4.011	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	118000	ug/L	118
Calcium	A	300000	353000	ug/L	118
Magnesium	A	100000	113200	ug/L	113
Molybdenum	A	2000	2492	ug/L	125
Potassium	A	100000	119200	ug/L	119
Sodium	E	250000	277000	ug/L	111
Iron	H	250000	286600	ug/L	115

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1320435	-16.07
Scandium	A	1231106	1148090	-6.74
Scandium	E	24365	26979	10.73
Scandium	H	535503	505602	-5.58
Germanium	H	118071	106247	-10.01
Germanium	E	15688	16351	4.23
Indium	A	1824394	1604049	-12.08
Bismuth	A	2493311	2015924	-19.15
Yttrium	A	1630607	1558875	-4.40
Terbium	A	3177227	2970965	-6.49

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591035 File : 09i16k00035 Time : 16-SEP-2009 16:28
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	200.0	187.5	ug/L	-6	20	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	535503	486274	-9.19
Scandium	A	1231106	1179487	-4.19
Scandium	E	24365	26475	8.66
Germanium	H	118071	104446	-11.54
Germanium	E	15688	16103	2.65
Indium	A	1824394	1650314	-9.54
Yttrium	A	1630607	1607587	-1.41

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591047 File : 09i16k00047 Time : 16-SEP-2009 18:39
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	0.0297	0.0191	100.0	99.24	ug/L	-1	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1558371	-0.94
Scandium	A	1231106	1265265	2.77
Scandium	E	24365	25478	4.57
Scandium	H	535503	469117	-12.40
Germanium	H	118071	106498	-9.80
Germanium	E	15688	16603	5.83
Indium	A	1824394	1802631	-1.19
Bismuth	A	2493311	2412406	-3.24
Yttrium	A	1630607	1658651	1.72
Terbium	A	3177227	3177406	0.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591048 File : 09i16k00048 Time : 16-SEP-2009 18:50
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	E	ND	0.1000	0.07446	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1559018	-0.90
Scandium	A	1231106	1241060	0.81
Scandium	E	24365	24673	1.26
Scandium	H	535503	453789	-15.26
Germanium	H	118071	105813	-10.38
Germanium	E	15688	16365	4.32
Indium	A	1824394	1843795	1.06
Bismuth	A	2493311	2487549	-0.23
Yttrium	A	1630607	1651656	1.29
Terbium	A	3177227	3168161	-0.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591054 File : 09i16k00054 Time : 16-SEP-2009 19:59
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	0.0297	0.0189	100.0	97.87	ug/L	-2	10	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1580629	0.47
Scandium	A	1231106	1273316	3.43
Scandium	E	24365	26133	7.26
Scandium	H	535503	452231	-15.55
Germanium	H	118071	102828	-12.91
Germanium	E	15688	16848	7.39
Indium	A	1824394	1829838	0.30
Bismuth	A	2493311	2446816	-1.86
Yttrium	A	1630607	1692000	3.77
Terbium	A	3177227	3214482	1.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591055 File : 09i16k00055 Time : 16-SEP-2009 20:10
Cal : 899373591001 Caldate : 16-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	E	ND	0.1000	0.07446	ug/L	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1650456	4.91
Scandium	A	1231106	1309635	6.38
Scandium	E	24365	25109	3.05
Scandium	H	535503	449123	-16.13
Germanium	H	118071	103990	-11.93
Germanium	E	15688	16822	7.23
Indium	A	1824394	1960185	7.44
Bismuth	A	2493311	2651692	6.35
Yttrium	A	1630607	1777690	9.02
Terbium	A	3177227	3373128	6.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591057 File : 09i16k00057 Time : 16-SEP-2009 20:33
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Nickel	E	3.835	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116700	ug/L	117
Calcium	A	300000	354300	ug/L	118
Magnesium	A	100000	111500	ug/L	112
Molybdenum	A	2000	2467	ug/L	123
Potassium	A	100000	119900	ug/L	120
Sodium	E	250000	275600	ug/L	110
Iron	H	250000	293000	ug/L	117

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1573174	1373298	-12.71
Scandium	A	1231106	1195691	-2.88
Scandium	E	24365	27642	13.45
Scandium	H	535503	442424	-17.38
Germanium	H	118071	94130	-20.28
Germanium	E	15688	16770	6.90
Indium	A	1824394	1681206	-7.85
Bismuth	A	2493311	2086627	-16.31
Yttrium	A	1630607	1635005	0.27
Terbium	A	3177227	3097068	-2.52

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214805 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899373591058 File : 09i16k00058 Time : 16-SEP-2009 20:44
Cal : 899373591001 Caldate : 16-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	E	200.0	183.9	ug/L	-8	20	

ISTD (ICALBLK 09i16k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	535503	423998	-20.82
Scandium	A	1231106	1209688	-1.74
Scandium	E	24365	27346	12.23
Germanium	H	118071	92248	-21.87
Germanium	E	15688	16750	6.77
Indium	A	1824394	1713591	-6.07
Yttrium	A	1630607	1694312	3.91

SAMPLE PREPARATION SUMMARY

Batch # : 154935
Started By : MCB
Method : 200.8
Spike #1 ID : S12256

Prep Date : 15-SEP-2009 19:30
Spike #2 ID : S12257

Analysis : ICAP
Finished By : MCB
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214799-003		Water	50	50	1	1.0						CD, PB	
214800-001		Water	50	50	1	1.0						CD, PB	
214801-001		Water	50	50	1	1.0						CD, PB	
214801-002		Water	50	50	1	1.0						CD, PB	
214804-005		Water	50	50	1	1.0						CR	
214805-006		Water	50	50	1	1.0						NI	
QC512147	BLANK	Water	50	50	1	1.0							
QC512148	BS	Water	50	50	1	1.0		.25	.25				
QC512149	BSD	Water	50	50	1	1.0		.25	.25				
QC512150	MS	Water	50	50	1	1.0		.25	.25				
QC512151	MSD	Water	50	50	1	1.0		.25	.25				
QC512152	SER	Water	50	50	1	1.0							
QC512153	PDS	Water	50	50	1	1.0							

Reviewed by: JYF Date: 09/17/09

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 154985
Digested by: MCB111
Date Digested: 9/15/09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK		50	50	N	
BS		↓	↓	↓	
BSD					
MS-799-003	A				
MSD-799-003	↓				
214799-003					
214800-001					
214801-001					
↓ -002	↓				
214804-005	D				
214805-006	↓	↓	↓	↓	

JWF 9/17/09

	Reagent ID or LIMS #		Initials / Date
Digestion tubes, lot #	J79714-261		
0.25 ~~.5~~ mL of spike solution (Std1) was added to all spikes	S12256		MCB 111 9/15/09
0.25 ~~.5~~ mL of spike solution (Std2) was added to all spikes	S12257		↓
digestion temperature (90-95 degrees C)	95°C		
digestion begun at (time)	7:30p		
concentrated HCl	H19031	JTBAKER	
concentrated HNO3	H12022	↓	
digestion ended at (time)	11:30pm		
☐ filtered thru' Whatman # 541	N/A		
Relinquished to ICP group	ICP		↓

Michael C Brooks 9/15/09
Prep Chemist / Date

Continued from page ____
Continued on page ____

JJ 9/17/09
Reviewed by / Date

Laboratory Job Number 214805

ANALYTICAL REPORT

Metals

Matrix: Filtrate

Curtis & Tompkins, Ltd.

Dissolved Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Batch#:	155039
Field ID:	PL-102A-9C1	Sampled:	09/08/09
Matrix:	Filtrate	Received:	09/10/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	1.000	Analyzed:	09/21/09

Type	Lab ID	Result	RL	ADEQ Flags
SAMPLE	214805-006	57	5.0	
BLANK	QC512563	ND	5.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Batch#:	155039
Field ID:	ZZZZZZZZZZ	Sampled:	09/08/09
MSS Lab ID:	214785-003	Received:	09/09/09
Matrix:	Filtrate	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC512564		200.0	187.4	94	89-120			
BSD	QC512565		200.0	184.6	92	89-120	2	20	
MS	QC512566	16.69	200.0	187.7	85	84-120			
MSD	QC512567		200.0	183.8	84	84-120	2	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	155039
MSS Lab ID:	214785-003	Sampled:	09/08/09
Lab ID:	QC512568	Received:	09/09/09
Matrix:	Filtrate	Analyzed:	09/21/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
16.69	5.000	ND	25.00	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	214805	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	155039
MSS Lab ID:	214785-003	Sampled:	09/08/09
Lab ID:	QC512569	Received:	09/09/09
Matrix:	Filtrate	Analyzed:	09/21/09

MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
16.69	500.0	464.9	90	75-125	

REPORTING SUMMARY FOR 214805 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	NI
214805-006	MET08	09/21/09 18:25	1.0	+
QC512563	MET08	09/21/09 16:54	1.0	+
QC512564	MET08	09/21/09 17:00	1.0	+
QC512565	MET08	09/21/09 17:05	1.0	+
QC512566	MET08	09/21/09 17:30	1.0	+
QC512567	MET08	09/21/09 17:37	1.0	+
QC512568	MET08	09/21/09 17:45	5.0	+
QC512569	MET08	09/21/09 17:54	1.0	+

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89380688

Instrument : MET08 Begun : 09/21/09 08:48
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sr_6010	ICALBLK				09/21/09 08:48	1.0		
002	met08_sr_6010	ICAL	CRIM08			09/21/09 08:53	1.0	1	
003	met08_sr_6010	ICAL	CS100			09/21/09 08:59	1.0	2	
004	met08_sr_6010	ICAL	CS1K			09/21/09 09:03	1.0	3	
005	met08_sr_6010	ICAL	CS10K			09/21/09 09:08	1.0	4	
006	met08_sr_6010	ICAL	CS100K			09/21/09 09:14	1.0	5	
007	met08_sr_6010	ICV				09/21/09 09:20	1.0	6	
008	met08_sr_6010	ICB				09/21/09 09:26	1.0		
009	met08_sr_6010	CRI				09/21/09 09:31	1.0	1	
010	met08_sr_6010	X				09/21/09 09:36	1.0	7	
011	met08_sr_6010	ICSA				09/21/09 09:39	1.0	7	10:AL=510000
012	met08_sr_6010	ICSAB				09/21/09 09:52	1.0	8	5:AL=520000
013	met08_sr_6010	BLANK	QC511638	Water	154805	09/21/09 09:58	1.0		
014	met08_sr_6010	BS	QC511639	Water	154805	09/21/09 10:04	1.0		
015	met08_sr_6010	BSD	QC511640	Water	154805	09/21/09 10:09	1.0		
016	met08_sr_6010	MSS	214728-005	Water	154805	09/21/09 10:14	1.0		1:NA=120000
017	met08_sr_6010	MS	QC511641	Water	154805	09/21/09 10:19	1.0		
018	met08_sr_6010	MSD	QC511642	Water	154805	09/21/09 10:24	1.0		
019	met08_sr_6010	SAMPLE	214728-001	Water	154805	09/21/09 10:29	1.0		
020	met08_sr_6010	SAMPLE	214735-001	Water	154805	09/21/09 10:37	1.0		2:CA=220000
021	met08_sr_6010	CCV				09/21/09 10:43	1.0	9	
022	met08_sr_6010	CCB				09/21/09 10:49	1.0		
023	met08_sr_6010	ICSAB				09/21/09 10:56	1.0	8	5:AL=510000
024	met08_sr_6010	X	RINSE			09/21/09 11:02	1.0		
025	met08_sr_6010	BSD	QC511640	Water	154805	09/21/09 11:08	1.0		
026	met08_sr_6010	BLANK	QC512718	Soil	155081	09/21/09 11:13	1.0		
027	met08_sr_6010	BS	QC512719	Soil	155081	09/21/09 11:19	1.0		
028	met08_sr_6010	BSD	QC512720	Soil	155081	09/21/09 11:24	1.0		
029	met08_sr_6010	MSS	215000-001	Soil	155081	09/21/09 11:29	1.0		4:FE=340000
030	met08_sr_6010	MS	QC512721	Soil	155081	09/21/09 11:35	1.0		
031	met08_sr_6010	MSD	QC512722	Soil	155081	09/21/09 11:42	1.0		
032	met08_sr_6010	SAMPLE	215000-002	Soil	155081	09/21/09 11:48	1.0		2:FE=280000
033	met08_sr_6010	X				09/21/09 11:54	1.0	9	
034	met08_sr_6010	X				09/21/09 11:56	1.0	9	
035	met08_sr_6010	CCV				09/21/09 11:59	1.0	9	
036	met08_sr_6010	CCB				09/21/09 12:06	1.0		
037	met08_sr_6010	ICSAB				09/21/09 12:12	1.0	8	5:AL=530000
038	met08_sr_6010	SAMPLE	214901-001	Soil	155081	09/21/09 12:18	1.0		9:FE=640000
039	met08_sr_6010	SAMPLE	214901-003	Soil	155081	09/21/09 12:24	1.0		8:FE=720000
040	met08_sr_6010	SAMPLE	214901-004	Soil	155081	09/21/09 12:31	1.0		7:PB=870000
041	met08_sr_6010	SAMPLE	214901-005	Soil	155081	09/21/09 12:37	1.0		4:PB=660000
042	met08_sr_6010	X	RINSE			09/21/09 12:44	1.0		
043	met08_sr_6010	X	RINSE			09/21/09 12:49	1.0		
044	met08_sr_6010	SAMPLE	214970-001	Miscell.	155081	09/21/09 12:54	1.0		2:FE=320000
045	met08_sr_6010	MSS	214710-003	Water	154719	09/21/09 12:59	10.0		
046	met08_sr_6010	MS	QC511308	Water	154719	09/21/09 13:06	10.0		
047	met08_sr_6010	X				09/21/09 13:11	1.0	9	
048	met08_sr_6010	X				09/21/09 13:13	1.0	9	
049	met08_sr_6010	X				09/21/09 13:19	1.0		
050	met08_sr_6010	X				09/21/09 13:23	1.0		
051	met08_sr_6010	MSD	QC511309	Water	154719	09/21/09 13:28	10.0		
052	met08_sr_6010	SAMPLE	214714-001	Water	154719	09/21/09 13:33	10.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89380688

Instrument : MET08 Begun : 09/21/09 08:48
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sr_6010	CRI				09/21/09 13:39	1.0	1	
054	met08_sr_6010	ICSAB				09/21/09 13:45	1.0	8	5:AL=550000
055	met08_sr_6010	CCV				09/21/09 13:51	1.0	9	
056	met08_sr_6010	X				09/21/09 13:54	1.0	9	
057	met08_sr_6010	CCB				09/21/09 14:00	1.0		
058	met08_sr_6010	MSS	215000-001	Soil	155081	09/21/09 14:08	20.0		
059	met08_sr_6010	MS	QC512721	Soil	155081	09/21/09 14:13	20.0		
060	met08_sr_6010	MSD	QC512722	Soil	155081	09/21/09 14:18	20.0		
061	met08_sr_6010	SAMPLE	214901-001	Soil	155081	09/21/09 14:23	20.0		1:ZN=11000
062	met08_sr_6010	SAMPLE	214901-002	Soil	155081	09/21/09 14:30	20.0		
063	met08_sr_6010	SAMPLE	214901-003	Soil	155081	09/21/09 14:35	20.0		
064	met08_sr_6010	SAMPLE	214901-004	Soil	155081	09/21/09 14:40	20.0		2:ZN=88000
065	met08_sr_6010	SAMPLE	214901-005	Soil	155081	09/21/09 14:47	20.0		2:ZN=49000
066	met08_sr_6010	CCV				09/21/09 14:53	1.0	9	
067	met08_sr_6010	X				09/21/09 14:55	1.0	9	
068	met08_sr_6010	CCB				09/21/09 15:01	1.0		
069	met08_sr_6010	SAMPLE	214901-006	Soil	155081	09/21/09 15:07	20.0		
070	met08_sr_6010	SAMPLE	214901-001	Soil	155081	09/21/09 15:12	200.0		
071	met08_sr_6010	SAMPLE	214901-004	Soil	155081	09/21/09 15:17	200.0		
072	met08_sr_6010	SAMPLE	214901-005	Soil	155081	09/21/09 15:24	200.0		
073	met08_sr_6010	ICSAB				09/21/09 15:30	1.0	8	5:AL=540000
074	met08_sr_6010	X	RINSE			09/21/09 15:36	1.0		
075	met08_sr_6010	BLANK	QC511754	TCLP Leachate	154836	09/21/09 15:41	10.0		1:NA=170000
076	met08_sr_6010	BLANK	QC511761	TCLP Leachate	154836	09/21/09 15:46	10.0		
077	met08_sr_6010	BS	QC511755	TCLP Leachate	154836	09/21/09 15:52	1.0		
078	met08_sr_6010	BSD	QC511756	TCLP Leachate	154836	09/21/09 15:57	1.0		
079	met08_sr_6010	CCV				09/21/09 16:02	1.0	9	
080	met08_sr_6010	CCB				09/21/09 16:08	1.0		
081	met08_sr_6010	MSS	214732-001	TCLP Leachate	154836	09/21/09 16:14	10.0		1:NA=180000
082	met08_sr_6010	MS	QC511757	TCLP Leachate	154836	09/21/09 16:20	10.0		
083	met08_sr_6010	MSD	QC511758	TCLP Leachate	154836	09/21/09 16:25	10.0		
084	met08_sr_6010	SAMPLE	214741-001	TCLP Leachate	154836	09/21/09 16:30	10.0		1:CA=310000
085	met08_sr_6010	SAMPLE	214741-002	TCLP Leachate	154836	09/21/09 16:37	10.0		2:CA=540000
086	met08_sr_6010	X				09/21/09 16:43	1.0	8	5:MG=560000
087	met08_sr_6010	X	RINSE			09/21/09 16:49	1.0		
088	met08_sr_6010	BLANK	QC512563	Filtrate	155039	09/21/09 16:54	1.0		
089	met08_sr_6010	BS	QC512564	Filtrate	155039	09/21/09 17:00	1.0		
090	met08_sr_6010	BSD	QC512565	Filtrate	155039	09/21/09 17:05	1.0		
091	met08_sr_6010	CCV				09/21/09 17:10	1.0	9	
092	met08_sr_6010	CCB				09/21/09 17:16	1.0		
093	met08_sr_6010	MSS	214785-003	Filtrate	155039	09/21/09 17:22	1.0		3:MG=690000
094	met08_sr_6010	MS	QC512566	Filtrate	155039	09/21/09 17:30	1.0		
095	met08_sr_6010	MSD	QC512567	Filtrate	155039	09/21/09 17:37	1.0		
096	met08_sr_6010	SER	QC512568	Filtrate	155039	09/21/09 17:45	5.0		
097	met08_sr_6010	PDS	QC512569	Filtrate	155039	09/21/09 17:54	1.0	10 11	
098	met08_sr_6010	SAMPLE	214785-002	Filtrate	155039	09/21/09 18:01	1.0		2:CA=1500000
099	met08_sr_6010	SAMPLE	214903-001	Filtrate	155039	09/21/09 18:07	1.0		3:MG=370000
100	met08_sr_6010	ICSAB				09/21/09 18:15	1.0	8	5:AL=540000
101	met08_sr_6010	X	RINSE			09/21/09 18:20	1.0		
102	met08_sr_6010	SAMPLE	214805-006	Filtrate	155039	09/21/09 18:25	1.0		1:NA=130000
103	met08_sr_6010	CCV				09/21/09 18:30	1.0	9	
104	met08_sr_6010	CCB				09/21/09 18:36	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89380688

Instrument : MET08 Begun : 09/21/09 08:48
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met08_sr_6010	SAMPLE	214858-002	Filtrate	155039	09/21/09 18:41	1.0		3:MG=430000
106	met08_sr_6010	SAMPLE	214858-003	Filtrate	155039	09/21/09 18:48	1.0		4:MG=1400000
107	met08_sr_6010	SAMPLE	214861-002	Filtrate	155039	09/21/09 18:56	1.0		3:CA=670000
108	met08_sr_6010	SAMPLE	214861-003	Filtrate	155039	09/21/09 19:03	1.0		3:CA=630000
109	met08_sr_6010	SAMPLE	214861-004	Filtrate	155039	09/21/09 19:09	1.0		2:CA=2200000
110	met08_sr_6010	SAMPLE	214861-005	Filtrate	155039	09/21/09 19:16	1.0		3:MG=570000
111	met08_sr_6010	SAMPLE	214923-005	Filtrate	155039	09/21/09 19:23	1.0		1:NA=210000
112	met08_sr_6010	SAMPLE	214923-006	Filtrate	155039	09/21/09 19:29	1.0		1:NA=210000
113	met08_sr_6010	CRI				09/21/09 19:34	1.0	1	
114	met08_sr_6010	X				09/21/09 19:38	1.0	1	
115	met08_sr_6010	ICSAB				09/21/09 19:44	1.0	8	5:AL=530000
116	met08_sr_6010	X				09/21/09 19:49	1.0	9	
117	met08_sr_6010	CCV				09/21/09 19:51	1.0	9	
118	met08_sr_6010	CCB				09/21/09 19:57	1.0		

AH 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 118.

Standards used: 1=S12500 2=S12797 3=S12796 4=S12795 5=S12798 6=S12881 7=S12810 8=S12730 9=S12882 10=S9267 11=S9268

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89380688

Date : 09/21/09 Reference : met08_sr_6010
Sequence : MET08 09/21/09 Analyzed : 09/21/09 08:53

#	Type	Sample ID	Y A
		ICAL STD	1411551
		LOWER LIMIT	423465
		UPPER LIMIT	2823102
008	ICB		1395929
011	ICSA		1238849
012	ICSAB		1231951
013	BLANK	QC511638	1493472
014	BS	QC511639	1462415
015	BSD	QC511640	1379346
016	MSS	214728-005	1423930
017	MS	QC511641	1390099
018	MSD	QC511642	1401857
019	SAMPLE	214728-001	1301686
020	SAMPLE	214735-001	1290921
021	CCV		1347178
022	CCB		1341639
023	ICSAB		1194566
025	BSD	QC511640	1391494
026	BLANK	QC512718	1423697
027	BS	QC512719	1282220
028	BSD	QC512720	1354613
029	MSS	215000-001	1264907
030	MS	QC512721	1299123
031	MSD	QC512722	1332315
032	SAMPLE	215000-002	1339331
035	CCV		1360354
036	CCB		1414570
037	ICSAB		1198430
038	SAMPLE	214901-001	1396149
039	SAMPLE	214901-003	1378193
040	SAMPLE	214901-004	1244366
041	SAMPLE	214901-005	1335587
044	SAMPLE	214970-001	1328123
045	MSS	214710-003	1356564
046	MS	QC511308	1352908
051	MSD	QC511309	1331751
054	ICSAB		1203368
055	CCV		1320669
057	CCB		1365853
058	MSS	215000-001	1336509
059	MS	QC512721	1366476
060	MSD	QC512722	1271235
061	SAMPLE	214901-001	1366744
062	SAMPLE	214901-002	1329790
063	SAMPLE	214901-003	1401903
064	SAMPLE	214901-004	1382838
065	SAMPLE	214901-005	1398606
066	CCV		1330195
068	CCB		1382254
069	SAMPLE	214901-006	1404350
070	SAMPLE	214901-001	1327087

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89380688

Date : 09/21/09 Reference : met08_sr_6010
Sequence : MET08 09/21/09 Analyzed : 09/21/09 08:53

#	Type	Sample ID	Y A
071	SAMPLE	214901-004	1386967
072	SAMPLE	214901-005	1396671
073	ICSAB		1168869
075	BLANK	QC511754	1295731
076	BLANK	QC511761	1334835
077	BS	QC511755	1338665
078	BSD	QC511756	1367489
079	CCV		1323128
080	CCB		1346617
081	MSS	214732-001	1292650
082	MS	QC511757	1256276
083	MSD	QC511758	1262499
084	SAMPLE	214741-001	1298534
085	SAMPLE	214741-002	1248412
088	BLANK	QC512563	1388746
089	BS	QC512564	1339173
090	BSD	QC512565	1363302
091	CCV		1287486
092	CCB		1372090
093	MSS	214785-003	1127650
094	MS	QC512566	1057760
095	MSD	QC512567	1095615
096	SER	QC512568	1236373
097	PDS	QC512569	1095416
098	SAMPLE	214785-002	1077951
099	SAMPLE	214903-001	1100344
100	ICSAB		1191627
102	SAMPLE	214805-006	1322848
103	CCV		1366880
104	CCB		1420221
105	SAMPLE	214858-002	1054788
106	SAMPLE	214858-003	965008
107	SAMPLE	214861-002	1063759
108	SAMPLE	214861-003	1097734
109	SAMPLE	214861-004	1055294
110	SAMPLE	214861-005	1128622
111	SAMPLE	214923-005	1327373
112	SAMPLE	214923-006	1393681
115	ICSAB		1227235
117	CCV		1379488
118	CCB		1422520

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214805 METALS Filtrate: EPA 6010B

Inst : MET08 Reviewer : ---
Calnum : 89380688001 Date : 21-SEP-2009 08:48
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sr_6010	89380688002	CRIM08	21-SEP-2009 08:53	S12500
L2	met08_sr_6010	89380688003	CS100	21-SEP-2009 08:59	S12797
L3	met08_sr_6010	89380688004	CS1K	21-SEP-2009 09:03	S12796
L4	met08_sr_6010	89380688005	CS10K	21-SEP-2009 09:08	S12795
L5	met08_sr_6010	89380688006	CS100K	21-SEP-2009 09:14	S12798

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Nickel	A	20.260	24.182	24.402	25.860		LOR0	0.00000	0.03869		23.676	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Nickel	A	5.000	-22	100.0	-6	1000	-6	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08
Calnum : 89380688001 Cal Date : 21-SEP-2009

ICV 89380688007 (21-SEP-2009) stds: S12881

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Nickel	A	5000	4845	ug/L	-3	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688008.2 File : met08_sr_6010 Time : 21-SEP-2009 09:26
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1395929	-1.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688011.2 File : met08_sr_6010 Time : 21-SEP-2009 09:39
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12810

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	18190	ug/L	91
Copper	A	20000	18380	ug/L	92
Manganese	A	20000	17210	ug/L	86
Nickel	A	20000	17180	ug/L	86
Vanadium	A	20000	19250	ug/L	96
Aluminum	R	500000	508400	ug/L	102
Calcium	R	500000	483100	ug/L	97
Iron	R	200000	194300	ug/L	97
Magnesium	R	500000	495600	ug/L	99
Titanium	R	20000	19750	ug/L	99

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1238849	-12.23

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688053.1 File : met08_sr_6010 Time : 21-SEP-2009 13:39
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12500

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	5.000	3.236	ug/L	**-35**	30	cri- ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1345432	-4.68

-=low bias

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688073.1 File : met08_sr_6010 Time : 21-SEP-2009 15:30
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	959.7	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1168869	-17.19

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688079.1 File : met08_sr_6010 Time : 21-SEP-2009 16:02
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	25.437	5000	4921	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1323128	-6.26

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688080.1 File : met08_sr_6010 Time : 21-SEP-2009 16:08
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1346617	-4.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688091.1 File : met08_sr_6010 Time : 21-SEP-2009 17:10
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	25.634	5000	4959	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1287486	-8.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688092.1 File : met08_sr_6010 Time : 21-SEP-2009 17:16
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1372090	-2.80

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688100.1 File : met08_sr_6010 Time : 21-SEP-2009 18:15
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	956.4	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1191627	-15.58

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688103.1 File : met08_sr_6010 Time : 21-SEP-2009 18:30
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	25.287	5000	4892	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1366880	-3.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688104.1 File : met08_sr_6010 Time : 21-SEP-2009 18:36
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1420221	0.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214805 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688115.1 File : met08_sr_6010 Time : 21-SEP-2009 19:44
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	911.2	ug/L	-9	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1227235	-13.06

SAMPLE PREPARATION SUMMARY

Batch # : 155039
Started By : VV
Method : METHOD
Spike #1 ID : S12256

Prep Date : 17-SEP-2009 09:00
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214785-002		Filtrate	50	50	1	1.0						TAL/ICP	
214785-003		Filtrate	50	50	1	1.0						TAL/ICP	
214805-006		Filtrate	50	50	1	1.0						NI	
214858-002		Filtrate	50	50	1	1.0						TAL/ICP	
214858-003		Filtrate	50	50	1	1.0						TAL/ICP	
214861-002		Filtrate	50	50	1	1.0						TAL/ICP	
214861-003		Filtrate	50	50	1	1.0						TAL/ICP	
214861-004		Filtrate	50	50	1	1.0						TAL/ICP	
214861-005		Filtrate	50	50	1	1.0						TAL/ICP	
214903-001		Filtrate	50	50	1	1.0						T22/ICP	
214923-005		Filtrate	50	50	1	1.0						NI	
214923-006		Filtrate	50	50	1	1.0						NI	
QC512563	BLANK	Filtrate	50	50	1	1.0							
QC512564	BS	Filtrate	50	50	1	1.0		.5	.5				
QC512565	BSD	Filtrate	50	50	1	1.0		.5	.5				
QC512566	MS	Filtrate	50	50	1	1.0		.5	.5				
QC512567	MSD	Filtrate	50	50	1	1.0		.5	.5				
QC512568	SER	Filtrate	50	50	1	1.0							
QC512569	PDS	Filtrate	50	50	1	1.0							

Reviewed by: AH Date: 09/22/09

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 155039
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☐ EPA 3010a for ICP
☐ EPA 200.7
☒ Filter Prep

BK2931
Page 18
Continued From: ∅
Continued On: ∅

	Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK 512563	QC	50	50	N	
*	BS 4					
*	BSD 5					
*	214785-002 MS	M				
*	- 003 MSD					
	- 002	G				
	- 003	M				
	214805-006	D				
	214858-002	A				
10	003	G				
	214861-002	G				
	- 003					
	- 004					
	- 005					
15	214903-001	G				
	214923-005	D				
	- 006					
20						

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	179714-261-	
0.5 mL of spike solution (Std1) was added to all spikes	512560 *	VV 9-17-09
0.5 mL of spike solution (Std2) was added to all spikes	512557 *	
Digestion temperature (90-95 degrees C)		
Digestion started at (time)	—	
☐ 1:1 HNO3, ☒ concentrated HNO3, added to all samples	H7022-JT Baker	
1:1 HCl added to all samples	4108100-Fisher	
Digestion ended at (time)	-	
☐ filtered thru' Whatman # 541	-	
Relinquished to ICP group		

VV 9-17-09
Prep Chemist Signature / Date

9/17/09
Reviewer Signature / Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214846
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091009B	214846-001
ASE-112A-9C1	214846-002
ASE-105A-9C1	214846-003
ASE-126A-9C1	214846-004
ASE-128A-9C1	214846-005
PL-505-9C1	214846-006
ASE-98A-9C1	214846-007
ASE-35A-9C1	214846-008
ASE-34B-9C1	214846-009
ASE-34A-9C1	214846-010
PL-515-9C1	214846-011
TB-090909A	214846-012
ASE-20B-9C1	214846-013
ASE-20C-9C1	214846-014
PL-504-9C1	214846-015
ASE-44B-9C1	214846-016
PL-506-9C1	214846-017
ASE-48B-9C1	214846-018
ASE-19C-9C1	214846-019
ASE-19B-9C1	214846-020
ASE-45B-9C1	214846-021

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214846**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/11/09**
Samples Received:	**09/11/09**

This data package contains sample and QC results for twenty one water samples, requested for the above referenced project on 09/11/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 08/07/09 13:33; affected data was qualified with "b".

Low response was observed for iodomethane in the ICV analyzed 08/07/09 19:33; affected data was qualified with "b".

Low response was observed for 2-hexanone in the CCV analyzed 09/22/09 11:24; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for bromomethane; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High response was observed for iodomethane in the CCV analyzed 09/21/09 09:30; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for bromomethane and iodomethane in the CCV analyzed 09/24/09 13:41; these analytes met minimum response criteria. High responses were observed for many analytes.

Low responses were observed for bromomethane and iodomethane in the CCV analyzed 09/24/09 18:34; these analytes met minimum response criteria, and affected data was qualified with "b". High responses were observed for many analytes; affected data was qualified with "b".

High recoveries were observed for n-butylbenzene in the MS/MSD of ASE-21C-9C1 (lab # 214805-007); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

Low recovery was observed for iodomethane in the LCS for batch 155261; the low recovery was not associated with any reported results. High recoveries

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214846**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/11/09**
Samples Received:	**09/11/09**

Volatile Organics by GC/MS (EPA 8260B):
were observed for many analytes; these high recoveries were not associated with any reported results.

High surrogate recoveries were observed for bromofluorobenzene in many samples.

Methylene chloride was detected above the RL in ASE-98A-9C1 (lab # 214846-007); this analyte is a common laboratory contaminant.

ASE-126A-9C1 (lab # 214846-004) was analyzed with more than 1 mL of headspace in the VOA vial.

No other analytical problems were encountered.

Chain of Custody

214846

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	214846
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor
Location of Site: Phoenix, AZ
Phase:
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. ~~Weise~~ Wiese - D. Foehr - M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
	Sample Identification										Units																
1	TB	--	--	TB-091009B	9/10/9	0005				1		N	X														
2	ASE-112A	--	91	ASE-112A-9C1	9/10/9	0028				4	G	N	X	X													
3	ASE-105A	--	103	ASE-105A-9C1	9/10/9	0101				4	G	N	X	X													
4	ASE-126A	--	122	ASE-126A-9C1	9/10/9	0200				4	G	N	X	X													
5	ASE-128A	--	120	ASE-128A-9C1	9/10/9	0248				4	G	N	X	X													
6	PL-505	--	--	PL-505-9C1	9/10/9	0251				4	G	N	X	X													
7	ASE-98A	--	123	ASE-98A-9C1	9/10/9	0330				4	G	N	X	X													
8	ASE-35A	--	95	ASE-35A-9C1	9/10/9	0440				3	G	N	X														
9	ASE-34B	--	109	ASE-34B-9C1	9/10/9	0518				3	G	N	X														
10	ASE-34A	--	97	ASE-34A-9C1	9/10/9	0544				3	G	N	X														
11	ERB	--	--	PL-515-9C1	9/10/9	0650				3	G	N	X														
12																											

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	H+A	09/10/09 15:30		Fed Ex	09/10/09 15:30	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
				C.T.	9/11/09 0845	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214846

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

Site Name: Sky Harbor
Location of Site: Phoenix, AZ
Phase:
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. ~~Weise~~ Wiese - D. Foehr - J. Yentes
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Order

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
12	1			TB-090909A	9.9.09	0600				1			*														
13	2			ASE-20B-9C1		0907				3			*														
14	3			ASE-20C-9C1		1001				3			*														
15	4			PL-504-9C1		1011				3			*														
16	5			ASE-44B-9C1		1047				3			*														
17	6			PL-506-9C1		1058				3			*														
18	7			ASE-48B-9C1		1141				3			*														
19	8			ASE-19C-9C1		1356				3			*														
20	9			ASE-19B-9C1		1438				3			*														
21	10			ASE-45B-9C1		1521				3			*														
	11																										
	12																										

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	H+A	09/10/09 15:30		Fed Ex	09/10/09 15:30	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
				CT	9/11/09 8:45	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214846 Date Received 9/11/09 Number of coolers 1
Client CH2MHILL Project QUARTERLY UST

Date Opened 9/11/09 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in _____ By (print) _____ (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info FEDEX 842193543071
2A. Were custody seals present? ... ☑ YES (circle) on cooler on samples ☐ NO
   How many 1 Name UNREADABLE Date 9/10/09
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.8

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are samples in the appropriate containers for indicated tests? _____ YES NO
11. Are sample labels present, in good condition and complete? _____ YES NO
12. Do the sample labels agree with custody papers? _____ YES NO
13. Was sufficient amount of sample sent for tests requested? _____ YES NO
14. Are the samples appropriately preserved? _____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Laboratory Job Number 214846

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/10/09
Units:	ug/L	Received:	09/11/09
Diln Fac:	1.000	Prepared:	09/17/09
Batch#:	155036		

Field ID: ASE-112A-9C1 Lab ID: 214846-002
Type: SAMPLE Analyzed: 09/21/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: ASE-105A-9C1 Lab ID: 214846-003
Type: SAMPLE Analyzed: 09/21/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	104	50-120	

Field ID: ASE-126A-9C1 Lab ID: 214846-004
Type: SAMPLE Analyzed: 09/21/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

Field ID: ASE-128A-9C1 Lab ID: 214846-005
Type: SAMPLE Analyzed: 09/21/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/10/09
Units:	ug/L	Received:	09/11/09
Diln Fac:	1.000	Prepared:	09/17/09
Batch#:	155036		

Field ID:	PL-505-9C1	Lab ID:	214846-006
Type:	SAMPLE	Analyzed:	09/21/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Field ID:	ASE-98A-9C1	Lab ID:	214846-007
Type:	SAMPLE	Analyzed:	09/21/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

Type:	BLANK	Analyzed:	09/20/09
Lab ID:	QC512546		

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	108	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	155036
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	1.000	Analyzed:	09/20/09

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC512547

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,000	80	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	88	50-120	

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC512548

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	1,815	73	54-120	10	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	80	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512556	Batch#:	155036
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/20/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,480	99	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214846 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214846 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214846 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
Seqnum : 869379381016 File : 263a016 Time : 20-SEP-2009 19:17
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	24822	500.0	513.4	mg/L	3	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28207	50.00	50.21	mg/L	0	15	

JDG 09/21/09 [Diesel C16-C24 A]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869379381017 File : 263a017 Time : 20-SEP-2009 19:45
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18698	500.0	516.1	mg/L	3	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	30465	50.00	54.23	mg/L	8	15	

JDG 09/21/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869379381032 File : 263a032 Time : 21-SEP-2009 02:49
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	25207	1000	1043	mg/L	4	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28323	50.00	50.42	mg/L	1	15	

JDG 09/21/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869379381033 File : 263a033 Time : 21-SEP-2009 03:18
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	19509	500.0	538.5	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	32020	50.00	57.00	mg/L	14	15	

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
Seqnum : 869379381046 File : 263a046 Time : 21-SEP-2009 10:48
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	25889	250.0	267.7	mg/L	7	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	27936	50.00	49.73	mg/L	-1	15	

JDG 09/21/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/21/09 Reviewer: EAH Date: 09/21/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869379381047 File : 263a047 Time : 21-SEP-2009 11:16
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18806	500.0	519.1	mg/L	4	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31210	50.00	55.56	mg/L	11	15	

JDG 09/21/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/21/09 Reviewer: EAH Date: 09/21/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813 12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895 23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869379381

Instrument : GC26A Begun : 09/20/09 11:01
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	263a001	X	IB				09/20/09 11:01	1.0	
002	263a002	X	CMARKER				09/20/09 11:29	1.0	1
003	263a003	CCV	DSL_1000				09/20/09 11:57	1.0	2
004	263a004	CCV	MO_500				09/20/09 12:26	1.0	3
005	263a005	CCV	JP5_250				09/20/09 12:54	1.0	4
006	263a006	BLANK	QC512279	S	Water	154968	09/20/09 14:33	1.0	
007	263a007	BS	QC512280	S	Water	154968	09/20/09 15:01	1.0	
008	263a008	BSD	QC512281	S	Water	154968	09/20/09 15:30	1.0	
009	263a009	SAMPLE	214873-009	S	Water	154968	09/20/09 15:58	1.0	
010	263a010	SAMPLE	214873-010	S	Water	154968	09/20/09 16:26	1.0	
011	263a011	SAMPLE	214873-011	S	Water	154968	09/20/09 16:55	1.0	
012	263a012	SAMPLE	214876-001	S	Water	154968	09/20/09 17:23	1.0	
013	263a013	SAMPLE	214876-002	S	Water	154968	09/20/09 17:52	1.0	
014	263a014	SAMPLE	214876-003	S	Water	154968	09/20/09 18:20	1.0	
015	263a015	SAMPLE	214876-004	S	Water	154968	09/20/09 18:48	1.0	
016	263a016	CCV	DSL_500				09/20/09 19:17	1.0	5
017	263a017	CCV	MO_500				09/20/09 19:45	1.0	3
018	263a018	CCV	JP5_250				09/20/09 20:13	1.0	4
019	263a019	X	CCV				09/20/09 20:41	1.0	5
020	263a020	X	CCV				09/20/09 21:09	1.0	3
021	263a021	X	CCV				09/20/09 21:38	1.0	4
022	263a022	BLANK	QC512546		Water	155036	09/20/09 22:06	1.0	
023	263a023	BLANK	QC512546	S	Water	155036	09/20/09 22:34	1.0	
024	263a024	BS	QC512547	S	Water	155036	09/20/09 23:03	1.0	
025	263a025	BSD	QC512548	S	Water	155036	09/20/09 23:31	1.0	
026	263a026	LCS	QC512556		Water	155036	09/20/09 23:59	1.0	
027	263a027	SAMPLE	214861-002	S	Water	155036	09/21/09 00:27	1.0	
028	263a028	SAMPLE	214861-003	S	Water	155036	09/21/09 00:56	1.0	
029	263a029	SAMPLE	214861-004	S	Water	155036	09/21/09 01:24	1.0	
030	263a030	SAMPLE	214861-005	S	Water	155036	09/21/09 01:53	1.0	
031	263a031	SAMPLE	214893-001	S	Water	155036	09/21/09 02:21	1.0	
032	263a032	CCV	DSL_1000				09/21/09 02:49	1.0	2
033	263a033	CCV	MO_500				09/21/09 03:18	1.0	3
034	263a034	X	CCV				09/21/09 03:46	1.0	2
035	263a035	X	CCV				09/21/09 04:14	1.0	3
036	263a036	SAMPLE	214846-002		Water	155036	09/21/09 04:43	1.0	
037	263a037	SAMPLE	214846-003		Water	155036	09/21/09 05:11	1.0	
038	263a038	SAMPLE	214846-004		Water	155036	09/21/09 05:39	1.0	
039	263a039	SAMPLE	214846-005		Water	155036	09/21/09 06:08	1.0	
040	263a040	SAMPLE	214846-006		Water	155036	09/21/09 07:58	1.0	
041	263a041	SAMPLE	214846-007		Water	155036	09/21/09 08:27	1.0	
042	263a042	SAMPLE	214896-001		Water	155036	09/21/09 08:55	1.0	
043	263a043	SAMPLE	214896-002		Water	155036	09/21/09 09:23	1.0	
044	263a044	SAMPLE	214896-003		Water	155036	09/21/09 09:52	1.0	
045	263a045	X	CMARKER				09/21/09 10:20	1.0	1
046	263a046	CCV	DSL_250				09/21/09 10:48	1.0	6
047	263a047	CCV	MO_500				09/21/09 11:16	1.0	3
048	263a048	CCV	JP5_250				09/21/09 12:15	1.0	4
049	263a049	SAMPLE	214873-009	S	Water	154968	09/21/09 12:52	1.0	
050	263a050	X	IB				09/21/09 13:25	1.0	
051	263a051	BLANK	QC512665	S	Soil	155065	09/21/09 13:53	1.0	
052	263a052	BLANK	QC512806	S	Soil	155101	09/21/09 15:55	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869379381

Instrument : GC26A Begun : 09/20/09 11:01
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	263a053	LCS	QC512807	S	Soil	155101	09/21/09 16:24	1.0		
054	263a054	BLANK	QC512806		Soil	155101	09/21/09 17:27	1.0		
055	263a055	SAMPLE	214878-001		Soil	155101	09/21/09 17:56	1.0		
056	263a056	SAMPLE	214878-002		Soil	155101	09/21/09 18:24	1.0		
057	263a057	BLANK	QC512830	S	Water	155106	09/21/09 18:52	1.0		
058	263a058	SAMPLE	214840-016	S	Water	155106	09/21/09 19:20	1.0		
059	263a059	PREPBLK	QC512833	S	WET DI Leachate	155106	09/21/09 19:48	1.0		
060	263a060	CCV	DSL_1000				09/21/09 20:17	1.0	2	
061	263a061	CCV	MO_500				09/21/09 20:45	1.0	3	
062	263a062	CCV	JP5_250				09/21/09 21:13	1.0	4	
063	263a063	BLANK	QC512830		Water	155106	09/21/09 21:41	1.0		
064	263a064	BLANK	QC512956	S	Soil	155137	09/21/09 22:18	1.0		
065	263a065	MSS	214913-013	S	Soil	155137	09/21/09 22:46	1.0		
066	263a066	SAMPLE	214913-002	S	Soil	155137	09/21/09 23:15	5.0		
067	263a067	SAMPLE	214913-003	S	Soil	155137	09/21/09 23:43	1.0		
068	263a068	SAMPLE	214913-004	S	Soil	155137	09/22/09 00:11	10.0		
069	263a069	SAMPLE	214913-005	S	Soil	155137	09/22/09 00:39	10.0		
070	263a070	SAMPLE	214913-006	S	Soil	155137	09/22/09 01:07	10.0		
071	263a071	X	IB				09/22/09 01:35	1.0		
072	263a072	BS	QC512831	S	Water	155106	09/22/09 02:04	1.0		
073	263a073	BSD	QC512832	S	Water	155106	09/22/09 02:32	1.0		
074	263a074	X	CMARKER				09/22/09 03:00	1.0	1	
075	263a075	CCV	DSL_250				09/22/09 03:29	1.0	6	
076	263a076	CCV	MO_500				09/22/09 03:57	1.0	3	
077	263a077	X	CCV				09/22/09 04:25	1.0	6	
078	263a078	X	CCV				09/22/09 04:54	1.0	3	
079	263a079	SAMPLE	214913-001	S	Soil	155137	09/22/09 05:22	10.0		
080	263a080	SAMPLE	214913-007	S	Soil	155137	09/22/09 05:51	5.0		
081	263a081	SAMPLE	214913-008	S	Soil	155137	09/22/09 06:19	10.0		
082	263a082	SAMPLE	214913-009	S	Soil	155137	09/22/09 06:47	5.0		
083	263a083	SAMPLE	214913-010	S	Soil	155137	09/22/09 07:15	5.0		
084	263a084	SAMPLE	214913-011	S	Soil	155137	09/22/09 07:44	5.0		
085	263a085	SAMPLE	214913-012	S	Soil	155137	09/22/09 08:12	5.0		
086	263a086	X	IB				09/22/09 08:40	1.0		
087	263a087	SAMPLE	214882-001	S	WET DI Leachate	155106	09/22/09 09:08	1.0		
088	263a088	SAMPLE	214882-002	S	WET DI Leachate	155106	09/22/09 09:36	1.0		
089	263a089	SAMPLE	214882-003	S	WET DI Leachate	155106	09/22/09 10:04	1.0		
090	263a090	CCV	DSL_500				09/22/09 10:33	1.0	5	
091	263a091	CCV	MO_500				09/22/09 11:01	1.0	3	
092	263a092	BLANK	QC512830	S	Water	155106	09/22/09 12:08	1.0		
093	263a093	BLANK	QC512950		Soil	155134	09/22/09 12:36	1.0		
094	263a094	LCS	QC512951		Soil	155134	09/22/09 13:04	1.0		
095	263a095	SAMPLE	214990-002		Soil	155134	09/22/09 13:32	1.0		
096	263a096	SAMPLE	214990-006		Soil	155134	09/22/09 14:00	3.0		
097	263a097	CCV	DSL_1000				09/22/09 14:29	1.0	2	
098	263a098	CCV	MO_500				09/22/09 14:57	1.0	3	

JDG 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 40.

JDG 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 41 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869379381

Instrument : GC26A Begun : 09/20/09 11:01
Method : EPA 8015B SOP Version : TEH_rv13

TFB 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 48 through 53.

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 54 through 85.

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 86 through 91.

TFB 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 92 through 98.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12969 5=S12546 6=S12545

SAMPLE PREPARATION SUMMARY

Batch # : 155036 Analysis : TEH
Started By : CRD Prep Date : 17-SEP-2009 21:10 Finished By : DJT
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12972 Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214846-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214846-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214846-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214846-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214846-006		Water	500	2.5	1	0.005	7	.5				TEHM	
214846-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214861-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214861-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214861-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214861-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
214893-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
214893-002		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
214893-003		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
214893-004		Water	500	2.5	1	0.005	10	.5			3630C	TEH	
214893-005		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
214893-006		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
214896-001		Water	500	2.5	1	0.005	7	.5				TEH	
214896-002		Water	500	2.5	1	0.005	7	.5				TEH	
214896-003		Water	500	2.5	1	0.005	7	.5				TEH	
QC512546	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC512547	BS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC512548	BSD	Water	500	2.5	1	0.005		.5	.5		3630C		
QC512556	LCS	Water	500	2.5	1	0.005		.5		.5			

JDG 09/21/09 : Matrix spikes were not performed for this analysis in batch 155036 due to insufficient sample amount.

Analyst: JDG Date: 09/21/09 Reviewer: TFB Date: 09/21/09

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: NAV
Cleanup Date: 9/20/09

Benchbook # **BK 2939**
Page 11

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
214801 - 002	155036	1.0	1.0	
- 003				
- 004				
- 005				
214893 - 001				
- 002				
- 003				
- 004				
- 005				
- 006				
MB QC512546				
LCS 7				
LCSD 8				

09/21/09

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___g columns	N/A	NAV 9/20/09
☐ Extracts were cleaned up using 1.0g cartridges	SP 11710	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM49182	
Concentrated to volumes as noted above	—	

Continued from page ___
Continued on page ___

Extraction Chemist / Date 9/20/09

09/21/09
Reviewed by / Date

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

Page 41 BK 2909

LIMS Batch No: 155036
LIMS Analysis: TEH/M
Date Extracted: 9/17/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214846-002	D	500	7	2.5		
003						
004						
005						
006						
007						
214861-002	H				X	
003	I					
004	H					
005	I					
214893-001	E					
002						
003						
004			10			
005			7			
006						
214896-001	I					
002	E					
003	D					
MB OCJ12546	NA		NA		X	
BS 47						
BSD 48						
~~PREP BK~~ LCS 56		500				
						9/21/09

BK 9/17/09

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	812934B	CRD 9/17/09
0.5 mL of TEH_SP was added to all spikes	512972B/512290C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS093334	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	2:15	
Extraction End Time:	1515	DJC 9/18/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	DJT 9/20/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49001904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/17/09
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

09/21/09
Reviewed by **Date**

Laboratory Job Number 214846

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091009B	Batch#:	155153
Lab ID:	214846-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091009B	Batch#:	155153
Lab ID:	214846-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	122 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-112A-9C1	Batch#:	155153
Lab ID:	214846-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.6	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-112A-9C1	Batch#:	155153
Lab ID:	214846-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	1.0	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	1.0	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-105A-9C1	Batch#:	155111
Lab ID:	214846-003	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-105A-9C1	Batch#:	155111
Lab ID:	214846-003	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-126A-9C1	Diln Fac:	1.000
Lab ID:	214846-004	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	155111	09/21/09	
Chloromethane	ND	1.0	155111	09/21/09	
Vinyl Chloride	1.2	0.5	155111	09/21/09	
Bromomethane	ND	1.0	155111	09/21/09	
Chloroethane	ND	1.0	155111	09/21/09	
Trichlorofluoromethane	ND	1.0	155111	09/21/09	
Iodomethane	ND	10	155111	09/21/09	V1
Acetone	ND	10	155111	09/21/09	
1,1-Dichloroethene	1.0	0.5	155111	09/21/09	
Methylene Chloride	ND	10	155111	09/21/09	
Carbon Disulfide	ND	0.5	155111	09/21/09	
MTBE	72	0.5	155111	09/21/09	
trans-1,2-Dichloroethene	ND	0.5	155111	09/21/09	
Vinyl Acetate	ND	10	155111	09/21/09	
1,1-Dichloroethane	13	0.5	155111	09/21/09	
2-Butanone	ND	10	155111	09/21/09	
cis-1,2-Dichloroethene	1.0	0.5	155111	09/21/09	
2,2-Dichloropropane	ND	0.5	155111	09/21/09	
Chloroform	ND	0.5	155111	09/21/09	
Bromochloromethane	ND	0.5	155111	09/21/09	
1,1,1-Trichloroethane	ND	0.5	155111	09/21/09	
1,1-Dichloropropene	ND	0.5	155111	09/21/09	
Carbon Tetrachloride	ND	0.5	155111	09/21/09	
1,2-Dichloroethane	ND	0.5	155111	09/21/09	
Benzene	ND	0.5	155111	09/21/09	
Trichloroethene	1.2	0.5	155111	09/21/09	
1,2-Dichloropropane	ND	0.5	155111	09/21/09	
Bromodichloromethane	ND	0.5	155111	09/21/09	
Dibromomethane	ND	0.5	155111	09/21/09	
4-Methyl-2-Pentanone	ND	10	155111	09/21/09	
cis-1,3-Dichloropropene	ND	0.5	155111	09/21/09	
Toluene	ND	0.5	155111	09/21/09	
trans-1,3-Dichloropropene	ND	0.5	155111	09/21/09	
1,1,2-Trichloroethane	ND	0.5	155111	09/21/09	
2-Hexanone	ND	10	155111	09/21/09	
1,3-Dichloropropane	ND	0.5	155111	09/21/09	
Tetrachloroethene	ND	0.5	155111	09/21/09	
Dibromochloromethane	ND	0.5	155111	09/21/09	
1,2-Dibromoethane	ND	0.5	155111	09/21/09	
Chlorobenzene	ND	0.5	155111	09/21/09	
1,1,1,2-Tetrachloroethane	ND	0.5	155111	09/21/09	
Ethylbenzene	ND	0.5	155111	09/21/09	
m,p-Xylenes	ND	0.5	155111	09/21/09	
o-Xylene	ND	0.5	155111	09/21/09	
Styrene	ND	0.5	155111	09/21/09	
Bromoform	ND	1.0	155111	09/21/09	
Isopropylbenzene	0.9	0.5	155261	09/24/09	
1,1,2,2-Tetrachloroethane	ND	0.5	155111	09/21/09	
1,2,3-Trichloropropane	ND	0.5	155111	09/21/09	
Propylbenzene	ND	0.5	155111	09/21/09	
Bromobenzene	ND	0.5	155111	09/21/09	
1,3,5-Trimethylbenzene	ND	0.5	155111	09/21/09	
2-Chlorotoluene	ND	0.5	155111	09/21/09	
4-Chlorotoluene	ND	0.5	155111	09/21/09	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-126A-9C1	Diln Fac:	1.000
Lab ID:	214846-004	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
tert-Butylbenzene	ND	0.5	155111	09/21/09	
1,2,4-Trimethylbenzene	ND	0.5	155111	09/21/09	
sec-Butylbenzene	0.9	0.5	155261	09/24/09	
para-Isopropyl Toluene	ND	0.5	155111	09/21/09	
1,3-Dichlorobenzene	ND	0.5	155111	09/21/09	
1,4-Dichlorobenzene	ND	0.5	155111	09/21/09	
n-Butylbenzene	ND	0.5	155111	09/21/09	
1,2-Dichlorobenzene	ND	0.5	155111	09/21/09	
1,2-Dibromo-3-Chloropropane	ND	2.0	155111	09/21/09	
1,2,4-Trichlorobenzene	ND	0.5	155111	09/21/09	
Hexachlorobutadiene	ND	2.0	155111	09/21/09	
Naphthalene	ND	2.0	155111	09/21/09	
1,2,3-Trichlorobenzene	ND	0.5	155111	09/21/09	
Xylene (total)	ND	0.5	155111	09/21/09	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	104	77-120	155111	09/21/09	
Dibromofluoromethane	102	77-120	155261	09/24/09	
1,2-Dichloroethane-d4	95	70-127	155111	09/21/09	
1,2-Dichloroethane-d4	121	70-127	155261	09/24/09	
Toluene-d8	106	83-125	155111	09/21/09	
Toluene-d8	104	83-125	155261	09/24/09	
Bromofluorobenzene	122 *	78-120	155111	09/21/09	S1
Bromofluorobenzene	109	78-120	155261	09/24/09	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-128A-9C1	Batch#:	155111
Lab ID:	214846-005	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-128A-9C1	Batch#:	155111
Lab ID:	214846-005	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	121 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

11.1

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-505-9C1	Batch#:	155111
Lab ID:	214846-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-505-9C1	Batch#:	155111
Lab ID:	214846-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	126 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

12.1

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-98A-9C1	Batch#:	155111
Lab ID:	214846-007	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	11	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-98A-9C1	Batch#:	155111
Lab ID:	214846-007	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	121 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-35A-9C1	Batch#:	155111
Lab ID:	214846-008	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	1.6	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-35A-9C1	Batch#:	155111
Lab ID:	214846-008	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	1.1	0.5	
o-Xylene	0.6	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	4.4	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	3.2	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	20	0.5	
sec-Butylbenzene	1.3	0.5	
para-Isopropyl Toluene	1.4	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	17	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	1.7	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-34B-9C1	Batch#:	155111
Lab ID:	214846-009	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.8	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-34B-9C1	Batch#:	155111
Lab ID:	214846-009	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	1.1	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	84	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	111	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-34A-9C1	Batch#:	155111
Lab ID:	214846-010	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	3.9	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	1.4	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-34A-9C1	Batch#:	155111
Lab ID:	214846-010	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	1.2	0.5	
m,p-Xylenes	4.8	0.5	
o-Xylene	1.1	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	16	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	23	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	8.0	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	0.9	0.5	
1,2,4-Trimethylbenzene	58	0.5	
sec-Butylbenzene	6.4	0.5	
para-Isopropyl Toluene	5.8	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	33	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	5.9	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	80	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	88	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-515-9C1	Batch#:	155153
Lab ID:	214846-011	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-515-9C1	Batch#:	155153
Lab ID:	214846-011	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090909A	Batch#:	155111
Lab ID:	214846-012	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-090909A	Batch#:	155111
Lab ID:	214846-012	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-20B-9C1	Batch#:	155111
Lab ID:	214846-013	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	1.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.3	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-20B-9C1	Batch#:	155111
Lab ID:	214846-013	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	76	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	111	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-20C-9C1	Batch#:	155111
Lab ID:	214846-014	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	7.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-20C-9C1	Batch#:	155111
Lab ID:	214846-014	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	77	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-504-9C1	Batch#:	155111
Lab ID:	214846-015	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	7.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-504-9C1	Batch#:	155111
Lab ID:	214846-015	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	80	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-44B-9C1	Batch#:	155111
Lab ID:	214846-016	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	5.4	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-44B-9C1	Batch#:	155111
Lab ID:	214846-016	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	83	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-506-9C1	Batch#:	155111
Lab ID:	214846-017	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-506-9C1	Batch#:	155111
Lab ID:	214846-017	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	85	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-48B-9C1	Batch#:	155111
Lab ID:	214846-018	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	14	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	8.5	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-48B-9C1	Batch#:	155111
Lab ID:	214846-018	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	86	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	121 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-19C-9C1	Batch#:	155111
Lab ID:	214846-019	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	4.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-19C-9C1	Batch#:	155111
Lab ID:	214846-019	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-19B-9C1	Batch#:	155111
Lab ID:	214846-020	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	1.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	1.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.9	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	8.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.2	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-19B-9C1	Batch#:	155111
Lab ID:	214846-020	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-45B-9C1	Batch#:	155111
Lab ID:	214846-021	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	0.9	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	18	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	2.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.0	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	6.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.0	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-45B-9C1	Batch#:	155111
Lab ID:	214846-021	Sampled:	09/09/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BS Lab ID: QC512854

Analyte	Spiked	Result		%REC	Limits	ADEQ Flags
Freon 12	25.00	25.68		103	56-140	
Chloromethane	25.00	20.66		83	46-142	
Vinyl Chloride	25.00	22.17		89	49-136	
Bromomethane	25.00	29.74		119	42-154	
Chloroethane	25.00	26.45		106	51-133	
Trichlorofluoromethane	25.00	23.30		93	63-135	
Iodomethane	25.00	31.55	b	126	70-130	V3
Acetone	25.00	22.36		89	48-130	
1,1-Dichloroethene	25.00	25.64		103	68-133	
Methylene Chloride	25.00	24.95		100	71-120	
Carbon Disulfide	25.00	23.32		93	56-120	
MTBE	25.00	23.63		95	58-120	
trans-1,2-Dichloroethene	25.00	27.58		110	80-120	
Vinyl Acetate	25.00	22.45		90	63-124	
1,1-Dichloroethane	25.00	26.06		104	77-120	
2-Butanone	25.00	22.75		91	57-120	
cis-1,2-Dichloroethene	25.00	25.79		103	75-120	
2,2-Dichloropropane	25.00	26.34		105	72-128	
Chloroform	25.00	24.18		97	78-120	
Bromochloromethane	25.00	26.08		104	78-120	
1,1,1-Trichloroethane	25.00	25.53		102	78-120	
1,1-Dichloropropene	25.00	25.63		103	75-120	
Carbon Tetrachloride	25.00	24.19		97	80-120	
1,2-Dichloroethane	25.00	22.68		91	74-120	
Benzene	25.00	26.02		104	77-120	
Trichloroethene	25.00	25.58		102	78-122	
1,2-Dichloropropane	25.00	25.18		101	76-120	
Bromodichloromethane	25.00	25.19		101	78-120	
Dibromomethane	25.00	24.36		97	77-120	
4-Methyl-2-Pentanone	25.00	21.13		85	65-120	
cis-1,3-Dichloropropene	25.00	27.18		109	76-120	
Toluene	25.00	25.71		103	73-120	
trans-1,3-Dichloropropene	25.00	23.73		95	72-120	
1,1,2-Trichloroethane	25.00	25.94		104	76-120	
2-Hexanone	25.00	20.92		84	57-121	
1,3-Dichloropropane	25.00	25.85		103	75-120	
Tetrachloroethene	25.00	24.86		99	77-120	
Dibromochloromethane	25.00	25.56		102	76-120	
1,2-Dibromoethane	25.00	25.39		102	77-120	
Chlorobenzene	25.00	25.46		102	78-120	
1,1,1,2-Tetrachloroethane	25.00	25.13		101	77-120	
Ethylbenzene	25.00	26.37		105	78-120	
m,p-Xylenes	50.00	54.96		110	77-120	
o-Xylene	25.00	26.50		106	77-120	
Styrene	25.00	27.35		109	77-120	
Bromoform	25.00	23.51		94	74-121	
Isopropylbenzene	25.00	23.97		96	71-120	
1,1,2,2-Tetrachloroethane	25.00	24.98		100	73-120	
1,2,3-Trichloropropane	25.00	25.65		103	72-120	
Propylbenzene	25.00	27.15		109	76-120	
Bromobenzene	25.00	25.10		100	75-120	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	26.42	106	77-120	
2-Chlorotoluene	25.00	27.21	109	76-120	
4-Chlorotoluene	25.00	26.82	107	78-120	
tert-Butylbenzene	25.00	25.45	102	76-120	
1,2,4-Trimethylbenzene	25.00	25.77	103	77-120	
sec-Butylbenzene	25.00	25.03	100	80-120	
para-Isopropyl Toluene	25.00	23.38	94	76-120	
1,3-Dichlorobenzene	25.00	25.78	103	75-120	
1,4-Dichlorobenzene	25.00	25.39	102	77-120	
n-Butylbenzene	25.00	29.17	117	76-120	
1,2-Dichlorobenzene	25.00	25.93	104	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.50	98	65-120	
1,2,4-Trichlorobenzene	25.00	22.56	90	73-121	
Hexachlorobutadiene	25.00	23.09	92	73-123	
Naphthalene	25.00	24.74	99	62-121	
1,2,3-Trichlorobenzene	25.00	23.56	94	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	99	78-120	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC512855

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	22.81	91	56-140	12	24	
Chloromethane	25.00	20.39	82	46-142	1	24	
Vinyl Chloride	25.00	21.18	85	49-136	5	24	
Bromomethane	25.00	29.31	117	42-154	1	24	
Chloroethane	25.00	24.13	97	51-133	9	25	
Trichlorofluoromethane	25.00	21.51	86	63-135	8	20	
Iodomethane	25.00	31.53 b	126	70-130	0	20	V3
Acetone	25.00	20.83	83	48-130	7	41	
1,1-Dichloroethene	25.00	24.04	96	68-133	6	20	
Methylene Chloride	25.00	23.72	95	71-120	5	20	
Carbon Disulfide	25.00	21.45	86	56-120	8	20	
MTBE	25.00	23.08	92	58-120	2	21	
trans-1,2-Dichloroethene	25.00	25.51	102	80-120	8	24	
Vinyl Acetate	25.00	21.75	87	63-124	3	24	
1,1-Dichloroethane	25.00	24.09	96	77-120	8	20	
2-Butanone	25.00	21.85	87	57-120	4	32	
cis-1,2-Dichloroethene	25.00	24.33	97	75-120	6	20	
2,2-Dichloropropane	25.00	24.10	96	72-128	9	24	
Chloroform	25.00	22.34	89	78-120	8	20	
Bromochloromethane	25.00	24.77	99	78-120	5	20	
1,1,1-Trichloroethane	25.00	23.63	95	78-120	8	20	
1,1-Dichloropropene	25.00	23.64	95	75-120	8	21	
Carbon Tetrachloride	25.00	22.26	89	80-120	8	21	
1,2-Dichloroethane	25.00	21.40	86	74-120	6	20	
Benzene	25.00	24.32	97	77-120	7	20	
Trichloroethene	25.00	23.77	95	78-122	7	20	
1,2-Dichloropropane	25.00	23.47	94	76-120	7	20	
Bromodichloromethane	25.00	23.47	94	78-120	7	20	
Dibromomethane	25.00	23.27	93	77-120	5	20	
4-Methyl-2-Pentanone	25.00	20.56	82	65-120	3	22	
cis-1,3-Dichloropropene	25.00	25.48	102	76-120	6	20	
Toluene	25.00	23.83	95	73-120	8	20	
trans-1,3-Dichloropropene	25.00	22.30	89	72-120	6	20	
1,1,2-Trichloroethane	25.00	24.82	99	76-120	4	20	
2-Hexanone	25.00	20.12	80	57-121	4	25	
1,3-Dichloropropane	25.00	24.71	99	75-120	4	20	
Tetrachloroethene	25.00	23.06	92	77-120	8	20	
Dibromochloromethane	25.00	24.15	97	76-120	6	20	
1,2-Dibromoethane	25.00	24.14	97	77-120	5	20	
Chlorobenzene	25.00	23.71	95	78-120	7	20	
1,1,1,2-Tetrachloroethane	25.00	23.34	93	77-120	7	20	
Ethylbenzene	25.00	24.19	97	78-120	9	26	
m,p-Xylenes	50.00	50.78	102	77-120	8	20	
o-Xylene	25.00	24.55	98	77-120	8	20	
Styrene	25.00	25.42	102	77-120	7	20	
Bromoform	25.00	22.51	90	74-121	4	21	
Isopropylbenzene	25.00	22.15	89	71-120	8	20	
1,1,2,2-Tetrachloroethane	25.00	24.37	97	73-120	3	20	
1,2,3-Trichloropropane	25.00	24.67	99	72-120	4	20	
Propylbenzene	25.00	24.91	100	76-120	9	20	
Bromobenzene	25.00	23.40	94	75-120	7	20	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155111
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	24.33	97	77-120	8	20	
2-Chlorotoluene	25.00	25.11	100	76-120	8	20	
4-Chlorotoluene	25.00	24.69	99	78-120	8	20	
tert-Butylbenzene	25.00	23.42	94	76-120	8	21	
1,2,4-Trimethylbenzene	25.00	23.91	96	77-120	7	20	
sec-Butylbenzene	25.00	23.05	92	80-120	8	21	
para-Isopropyl Toluene	25.00	21.74	87	76-120	7	20	
1,3-Dichlorobenzene	25.00	23.94	96	75-120	7	20	
1,4-Dichlorobenzene	25.00	23.75	95	77-120	7	23	
n-Butylbenzene	25.00	25.81	103	76-120	12	21	
1,2-Dichlorobenzene	25.00	24.11	96	76-120	7	20	
1,2-Dibromo-3-Chloropropane	25.00	23.55	94	65-120	4	22	
1,2,4-Trichlorobenzene	25.00	21.19	85	73-121	6	20	
Hexachlorobutadiene	25.00	21.43	86	73-123	7	25	
Naphthalene	25.00	23.78	95	62-121	4	32	
1,2,3-Trichlorobenzene	25.00	22.52	90	66-123	5	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	97	78-120	

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512856	Batch#:	155111
Matrix:	Water	Analyzed:	09/21/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512856	Batch#:	155111
Matrix:	Water	Analyzed:	09/21/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	123 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	25.09	100	56-140	
Chloromethane	25.00	24.06	96	46-142	
Vinyl Chloride	25.00	25.18	101	49-136	
Bromomethane	25.00	30.49 b	122	42-154	V3
Chloroethane	25.00	25.43	102	51-133	
Trichlorofluoromethane	25.00	22.49	90	63-135	
Iodomethane	25.00	28.96	116	70-130	
Acetone	25.00	21.26	85	48-130	
1,1-Dichloroethene	25.00	24.39	98	68-133	
Methylene Chloride	25.00	25.20	101	71-120	
Carbon Disulfide	25.00	23.13	93	56-120	
MTBE	25.00	23.53	94	58-120	
trans-1,2-Dichloroethene	25.00	26.34	105	80-120	
Vinyl Acetate	25.00	22.50	90	63-124	
1,1-Dichloroethane	25.00	25.06	100	77-120	
2-Butanone	25.00	22.39	90	57-120	
cis-1,2-Dichloroethene	25.00	24.90	100	75-120	
2,2-Dichloropropane	25.00	24.54	98	72-128	
Chloroform	25.00	22.81	91	78-120	
Bromochloromethane	25.00	25.78	103	78-120	
1,1,1-Trichloroethane	25.00	23.56	94	78-120	
1,1-Dichloropropene	25.00	23.29	93	75-120	
Carbon Tetrachloride	25.00	21.51	86	80-120	
1,2-Dichloroethane	25.00	22.00	88	74-120	
Benzene	25.00	24.80	99	77-120	
Trichloroethene	25.00	23.39	94	78-122	
1,2-Dichloropropane	25.00	23.78	95	76-120	
Bromodichloromethane	25.00	23.44	94	78-120	
Dibromomethane	25.00	23.45	94	77-120	
4-Methyl-2-Pentanone	25.00	20.17	81	65-120	
cis-1,3-Dichloropropene	25.00	25.57	102	76-120	
Toluene	25.00	24.09	96	73-120	
trans-1,3-Dichloropropene	25.00	22.55	90	72-120	
1,1,2-Trichloroethane	25.00	24.65	99	76-120	
2-Hexanone	25.00	19.54 b	78	57-121	V9
1,3-Dichloropropane	25.00	24.55	98	75-120	
Tetrachloroethene	25.00	22.04	88	77-120	
Dibromochloromethane	25.00	23.68	95	76-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	24.06	96	77-120	
Chlorobenzene	25.00	23.61	94	78-120	
1,1,1,2-Tetrachloroethane	25.00	22.87	91	77-120	
Ethylbenzene	25.00	23.81	95	78-120	
m,p-Xylenes	50.00	49.03	98	77-120	
o-Xylene	25.00	23.71	95	77-120	
Styrene	25.00	24.73	99	77-120	
Bromoform	25.00	22.01	88	74-121	
Isopropylbenzene	25.00	21.70	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.17	101	73-120	
1,2,3-Trichloropropane	25.00	25.39	102	72-120	
Propylbenzene	25.00	23.58	94	76-120	
Bromobenzene	25.00	24.49	98	75-120	
1,3,5-Trimethylbenzene	25.00	25.43	102	77-120	
2-Chlorotoluene	25.00	25.33	101	76-120	
4-Chlorotoluene	25.00	24.51	98	78-120	
tert-Butylbenzene	25.00	21.43	86	76-120	
1,2,4-Trimethylbenzene	25.00	26.06	104	77-120	
sec-Butylbenzene	25.00	21.16	85	80-120	
para-Isopropyl Toluene	25.00	22.04	88	76-120	
1,3-Dichlorobenzene	25.00	23.90	96	75-120	
1,4-Dichlorobenzene	25.00	23.54	94	77-120	
n-Butylbenzene	25.00	29.02	116	76-120	
1,2-Dichlorobenzene	25.00	24.16	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.86	95	65-120	
1,2,4-Trichlorobenzene	25.00	23.44	94	73-121	
Hexachlorobutadiene	25.00	20.08	80	73-123	
Naphthalene	25.00	25.89	104	62-121	
1,2,3-Trichlorobenzene	25.00	24.60	98	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	102	78-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	121 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513027

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	27.44	110	56-140	
Chloromethane	<0.2000	25.00	27.59	110	46-142	
Vinyl Chloride	<0.1000	25.00	28.18	113	49-136	
Bromomethane	<0.2000	25.00	33.33 b	133	42-154	V3
Chloroethane	<0.2000	25.00	28.30	113	51-133	
Trichlorofluoromethane	<0.2000	25.00	24.84	99	63-135	
Iodomethane	<2.000	25.00	30.99	124	60-140	
Acetone	<1.000	25.00	22.92	92	48-130	
1,1-Dichloroethene	<0.1000	25.00	27.97	112	68-133	
Methylene Chloride	0.3266	25.00	27.21	108	71-120	
Carbon Disulfide	<0.1000	25.00	26.98	108	56-120	
MTBE	<0.1000	25.00	24.62	98	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	28.94	116	80-120	
Vinyl Acetate	<2.000	25.00	24.66	99	63-124	
1,1-Dichloroethane	<0.1000	25.00	28.24	113	77-120	
2-Butanone	<2.000	25.00	24.62	98	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	26.98	108	75-120	
2,2-Dichloropropane	<0.1000	25.00	28.33	113	72-128	
Chloroform	0.1148	25.00	25.52	102	78-120	
Bromochloromethane	<0.1000	25.00	27.36	109	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	27.42	110	78-120	
1,1-Dichloropropene	<0.1000	25.00	26.74	107	75-120	
Carbon Tetrachloride	<0.1000	25.00	24.70	99	80-120	
1,2-Dichloroethane	<0.1000	25.00	24.03	96	74-120	
Benzene	<0.1000	25.00	26.89	108	77-120	
Trichloroethene	<0.1000	25.00	25.64	103	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.58	102	76-120	
Bromodichloromethane	<0.1000	25.00	24.97	100	78-120	
Dibromomethane	<0.1000	25.00	24.50	98	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.13	85	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	26.66	107	76-120	
Toluene	0.2653	25.00	25.77	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.46	94	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.39	102	76-120	
2-Hexanone	<2.000	25.00	20.07 b	80	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.59	102	75-120	
Tetrachloroethene	<0.1316	25.00	24.31	97	77-120	
Dibromochloromethane	<0.1000	25.00	24.30	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.34	97	77-120	
Chlorobenzene	<0.1000	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.25	97	77-120	
Ethylbenzene	<0.1000	25.00	26.24	105	78-120	
m,p-Xylenes	<0.1594	50.00	53.82	108	77-120	
o-Xylene	<0.1000	25.00	25.77	103	77-120	
Styrene	<0.1000	25.00	26.58	106	77-120	
Bromoform	<0.2000	25.00	22.41	90	74-121	
Isopropylbenzene	<0.1000	25.00	23.65	95	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.09	100	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.03	104	72-120	
Propylbenzene	<0.1000	25.00	26.63	107	76-120	
Bromobenzene	<0.1000	25.00	24.37	97	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.61	106	77-120	
2-Chlorotoluene	<0.1000	25.00	27.05	108	76-120	
4-Chlorotoluene	<0.1000	25.00	26.34	105	78-120	
tert-Butylbenzene	<0.1000	25.00	24.61	98	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.76	107	77-120	
sec-Butylbenzene	<0.1029	25.00	24.42	98	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.42	94	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.18	101	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.68	99	77-120	
n-Butylbenzene	<0.1285	25.00	31.43	126 *	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.19	101	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.00	96	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	23.55	94	73-121	
Hexachlorobutadiene	<0.4000	25.00	22.13	89	73-123	
Naphthalene	<0.4000	25.00	25.49	102	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	24.19	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	27.26	109	56-140	1	24	
Chloromethane	25.00	27.66	111	46-142	0	24	
Vinyl Chloride	25.00	28.73	115	49-136	2	24	
Bromomethane	25.00	32.55 b	130	42-154	2	24	V3
Chloroethane	25.00	27.91	112	51-133	1	25	
Trichlorofluoromethane	25.00	23.79	95	63-135	4	20	
Iodomethane	25.00	32.18	129	60-140	4	30	
Acetone	25.00	23.98	96	48-130	5	41	
1,1-Dichloroethene	25.00	27.76	111	68-133	1	20	
Methylene Chloride	25.00	26.94	106	71-120	1	20	
Carbon Disulfide	25.00	26.28	105	56-120	3	20	
MTBE	25.00	25.07	100	58-120	2	21	
trans-1,2-Dichloroethene	25.00	28.24	113	80-120	2	24	
Vinyl Acetate	25.00	24.61	98	63-124	0	24	
1,1-Dichloroethane	25.00	27.38	110	77-120	3	20	
2-Butanone	25.00	24.07	96	57-120	2	32	
cis-1,2-Dichloroethene	25.00	26.43	106	75-120	2	20	
2,2-Dichloropropane	25.00	27.44	110	72-128	3	24	
Chloroform	25.00	24.72	98	78-120	3	20	
Bromochloromethane	25.00	26.88	108	78-120	2	20	
1,1,1-Trichloroethane	25.00	26.42	106	78-120	4	20	
1,1-Dichloropropene	25.00	26.16	105	75-120	2	21	
Carbon Tetrachloride	25.00	23.90	96	80-120	3	21	
1,2-Dichloroethane	25.00	23.54	94	74-120	2	20	
Benzene	25.00	26.27	105	77-120	2	20	
Trichloroethene	25.00	24.84	99	78-122	3	20	
1,2-Dichloropropane	25.00	25.13	101	76-120	2	20	
Bromodichloromethane	25.00	24.74	99	78-120	1	20	
Dibromomethane	25.00	24.35	97	77-120	1	20	
4-Methyl-2-Pentanone	25.00	21.17	85	65-120	0	22	
cis-1,3-Dichloropropene	25.00	26.38	106	76-120	1	20	
Toluene	25.00	25.38	100	73-120	2	20	
trans-1,3-Dichloropropene	25.00	23.28	93	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.46	102	76-120	0	20	
2-Hexanone	25.00	20.17 b	81	57-121	1	25	V9
1,3-Dichloropropane	25.00	25.43	102	75-120	1	20	
Tetrachloroethene	25.00	23.62	94	77-120	3	20	
Dibromochloromethane	25.00	24.22	97	76-120	0	20	
1,2-Dibromoethane	25.00	24.55	98	77-120	1	20	
Chlorobenzene	25.00	24.47	98	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	23.74	95	77-120	2	20	
Ethylbenzene	25.00	25.52	102	78-120	3	26	
m,p-Xylenes	50.00	52.06	104	77-120	3	20	
o-Xylene	25.00	24.87	99	77-120	4	20	
Styrene	25.00	25.65	103	77-120	4	20	
Bromoform	25.00	21.99	88	74-121	2	21	
Isopropylbenzene	25.00	23.34	93	71-120	1	20	
1,1,2,2-Tetrachloroethane	25.00	25.64	103	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	26.64	107	72-120	2	20	
Propylbenzene	25.00	26.01	104	76-120	2	20	
Bromobenzene	25.00	24.70	99	75-120	1	20	
1,3,5-Trimethylbenzene	25.00	26.85	107	77-120	1	20	
2-Chlorotoluene	25.00	27.09	108	76-120	0	20	
4-Chlorotoluene	25.00	25.94	104	78-120	2	20	
tert-Butylbenzene	25.00	23.48	94	76-120	5	21	
1,2,4-Trimethylbenzene	25.00	26.76	107	77-120	0	20	
sec-Butylbenzene	25.00	23.55	94	80-120	4	21	
para-Isopropyl Toluene	25.00	23.59	94	76-120	1	20	
1,3-Dichlorobenzene	25.00	24.65	99	75-120	2	20	
1,4-Dichlorobenzene	25.00	24.45	98	77-120	1	23	
n-Butylbenzene	25.00	31.68	127 *	76-120	1	21	M1
1,2-Dichlorobenzene	25.00	24.99	100	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	25.12	100	65-120	5	22	
1,2,4-Trichlorobenzene	25.00	23.49	94	73-121	0	20	
Hexachlorobutadiene	25.00	22.28	89	73-123	1	25	
Naphthalene	25.00	26.42	106	62-121	4	32	
1,2,3-Trichlorobenzene	25.00	24.86	99	66-123	3	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513468	Batch#:	155261
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	L1 V1
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	L1 V1
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	L1 V1
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513468	Batch#:	155261
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	120	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513532	Batch#:	155261
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	21.25	21.60	102	56-140	
Chloromethane	21.25	23.74	112	46-142	
Vinyl Chloride	21.25	20.75	98	49-136	
Bromomethane	21.25	12.23 b	58	42-154	V9
Chloroethane	21.25	20.95	99	51-133	
Trichlorofluoromethane	21.25	19.41	91	63-135	
Iodomethane	21.25	14.32 b	67 *	70-130	L2 V9
Acetone	21.25	22.64	107	48-130	
1,1-Dichloroethene	21.25	20.79	98	68-133	
Methylene Chloride	21.25	19.75	93	71-120	
Carbon Disulfide	21.25	19.66	93	56-120	
MTBE	21.25	21.42	101	58-120	
trans-1,2-Dichloroethene	21.25	21.44	101	80-120	
Vinyl Acetate	21.25	43.62 b	205 *	63-124	L1 R2 V3
1,1-Dichloroethane	21.25	22.95	108	77-120	
2-Butanone	21.25	28.25 b	133 *	57-120	L1 V3
cis-1,2-Dichloroethene	21.25	21.11	99	75-120	
2,2-Dichloropropane	21.25	27.31 b	129 *	72-128	L1 V3
Chloroform	21.25	20.96	99	78-120	
Bromochloromethane	21.25	22.39	105	78-120	
1,1,1-Trichloroethane	21.25	21.91	103	78-120	
1,1-Dichloropropene	21.25	22.36	105	75-120	
Carbon Tetrachloride	21.25	22.03	104	80-120	
1,2-Dichloroethane	21.25	25.07	118	74-120	
Benzene	21.25	21.70	102	77-120	
Trichloroethene	21.25	19.99	94	78-122	
1,2-Dichloropropane	21.25	23.35	110	76-120	
Bromodichloromethane	21.25	22.37	105	78-120	
Dibromomethane	21.25	21.97	103	77-120	
4-Methyl-2-Pentanone	21.25	29.39 b	138 *	65-120	L1 V3
cis-1,3-Dichloropropene	21.25	25.23	119	76-120	
Toluene	21.25	21.19	100	73-120	
trans-1,3-Dichloropropene	21.25	22.69	107	72-120	
1,1,2-Trichloroethane	21.25	22.62	106	76-120	
2-Hexanone	21.25	28.47 b	134 *	57-121	L1 V3
1,3-Dichloropropane	21.25	23.02	108	75-120	
Tetrachloroethene	21.25	20.35	96	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214846	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513532	Batch#:	155261
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	21.25	21.16	100	76-120	
1,2-Dibromoethane	21.25	22.68	107	77-120	
Chlorobenzene	21.25	21.15	100	78-120	
1,1,1,2-Tetrachloroethane	21.25	21.40	101	77-120	
Ethylbenzene	21.25	21.64	102	78-120	
m,p-Xylenes	42.50	44.13	104	77-120	
o-Xylene	21.25	21.87	103	77-120	
Styrene	21.25	22.76	107	77-120	
Bromoform	21.25	18.85	89	74-121	
Isopropylbenzene	21.25	18.77	88	71-120	
1,1,2,2-Tetrachloroethane	21.25	23.13	109	73-120	
1,2,3-Trichloropropane	21.25	21.97	103	72-120	
Propylbenzene	21.25	20.98	99	76-120	
Bromobenzene	21.25	21.00	99	75-120	
1,3,5-Trimethylbenzene	21.25	22.47	106	77-120	
2-Chlorotoluene	21.25	21.71	102	76-120	
4-Chlorotoluene	21.25	21.07	99	78-120	
tert-Butylbenzene	21.25	22.84	107	76-120	
1,2,4-Trimethylbenzene	21.25	22.46	106	77-120	
sec-Butylbenzene	21.25	22.76	107	80-120	
para-Isopropyl Toluene	21.25	23.29	110	76-120	
1,3-Dichlorobenzene	21.25	21.12	99	75-120	
1,4-Dichlorobenzene	21.25	20.94	99	77-120	
n-Butylbenzene	21.25	23.11	109	76-120	
1,2-Dichlorobenzene	21.25	21.40	101	76-120	
1,2-Dibromo-3-Chloropropane	21.25	23.52	111	65-120	
1,2,4-Trichlorobenzene	21.25	23.58	111	73-121	
Hexachlorobutadiene	21.25	27.98 b	132 *	73-123	L1 V3
Naphthalene	21.25	27.23 b	128 *	62-121	L1 V3
1,2,3-Trichlorobenzene	21.25	23.83	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	105	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479315844008 File : hh708 Time : 07-AUG-2009 11:41

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	11812	17.13	
75	30% - 60% of mass 95	29493	42.78	
95		68936	100.00	
96	5% - 9% of mass 95	4074	5.91	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	65805	95.46	
175	5% - 9% of mass 174	5150	7.83	
176	> 95% and < 101% of mass 174	64186	97.54	
177	5% - 9% of mass 176	4366	6.80	

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479320168003 File : hha03 Time : 10-AUG-2009 09:02

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	16882	21.63	
75	30% - 60% of mass 95	39086	50.08	
95		78040	100.00	
96	5% - 9% of mass 95	5159	6.61	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	65181	83.52	
175	5% - 9% of mass 174	4957	7.60	
176	> 95% and < 101% of mass 174	62109	95.29	
177	5% - 9% of mass 176	3831	6.17	

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479385171002 File : hio02 Time : 24-SEP-2009 12:01

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	28960	21.25	
75	30% - 60% of mass 95	65373	47.96	
95		136301	100.00	
96	5% - 9% of mass 95	8925	6.55	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	112605	82.61	
175	5% - 9% of mass 174	8577	7.62	
176	> 95% and < 101% of mass 174	109970	97.66	
177	5% - 9% of mass 176	6760	6.15	

Analyst: TEW Date: 09/24/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479385171013 File : hio13 Time : 24-SEP-2009 18:01

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	34290	21.80	
75	30% - 60% of mass 95	75344	47.90	
95		157285	100.00	
96	5% - 9% of mass 95	10982	6.98	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	131805	83.80	
175	5% - 9% of mass 174	9795	7.43	
176	> 95% and < 101% of mass 174	129307	98.10	
177	5% - 9% of mass 176	8026	6.21	

Analyst: TEW Date: 09/24/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839380641003 File : kil03 Time : 21-SEP-2009 08:39

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10920	16.10	
75	30% - 60% of mass 95	32652	48.15	
95		67815	100.00	
96	5% - 9% of mass 95	4617	6.81	
173	< 2% of mass 174	342	0.70	
174	> 50% and < 100% of mass 95	48712	71.83	
175	5% - 9% of mass 174	3453	7.09	
176	> 95% and < 101% of mass 174	47661	97.84	
177	5% - 9% of mass 176	3534	7.41	

Analyst: BO Date: 09/21/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS BFB TUNE FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839382075009 File : kim09 Time : 22-SEP-2009 11:11

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13985	15.86	
75	30% - 60% of mass 95	40908	46.38	
95		88202	100.00	
96	5% - 9% of mass 95	5034	5.71	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	66128	74.97	
175	5% - 9% of mass 174	4773	7.22	
176	> 95% and < 101% of mass 174	64261	97.18	
177	5% - 9% of mass 176	4364	6.79	

Analyst: BO Date: 09/22/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214846 MSVOA Water: EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 479315844001 Date : 07-AUG-2009 13:33 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	hh711	479315844011	0.25/0.5PPB	07-AUG-2009 13:33	S12664 (200000X), S12665 (200000X), S12666 (200000X), S12667 (100000X), S12562 (5000X)
L2	hh712	479315844012	0.5/1PPB	07-AUG-2009 14:09	S12664 (100000X), S12665 (100000X), S12666 (100000X), S12667 (50000X), S12562 (5000X)
L3	hh713	479315844013	2PPB	07-AUG-2009 14:45	S12664 (25000X), S12665 (25000X), S12666 (50000X), S12667 (25000X), S12562 (5000X)
L4	hh714	479315844014	5PPB	07-AUG-2009 15:21	S12664 (10000X), S12665 (10000X), S12666 (20000X), S12667 (10000X), S12562 (5000X)
L5	hh715	479315844015	10PPB	07-AUG-2009 15:57	S12664 (5000X), S12665 (5000X), S12666 (10000X), S12667 (5000X), S12562 (5000X)
L6	hh716	479315844016	20PPB	07-AUG-2009 16:33	S12508 (25000X), S12517 (25000X), S12217 (50000X), S12487 (25000X), S12562 (5000X)
L7	hh717	479315844017	50PPB	07-AUG-2009 17:09	S12508 (10000X), S12517 (10000X), S12217 (20000X), S12487 (10000X), S12562 (5000X)
L8	hh718	479315844018	75PPB	07-AUG-2009 17:45	S12508 (6667X), S12517 (6667X), S12217 (13330X), S12487 (6667X), S12562 (5000X)
L9	hh719	479315844019	100PPB	07-AUG-2009 18:21	S12508 (5000X), S12517 (5000X), S12217 (10000X), S12487 (5000X), S12562 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.2824m	0.3907m	0.3765m	0.3794m	0.3896m	0.4061m	0.3838m	0.3558m	AVRG		2.69882		0.3705	10	15	0.05	0.99	
Chloromethane		0.3645m	0.4223m	0.4027	0.3499m	0.3426m	0.3376	0.3291	0.3071	AVRG		2.80142		0.3570	11	15	0.10	0.99	
Vinyl Chloride	0.2666m	0.2639m	0.3623m	0.3535m	0.3222m	0.3280m	0.3307m	0.3186	0.2968	AVRG		3.16622		0.3158	11	15	0.05	0.99	
Bromomethane		0.1490m	0.2129m	0.2217m	0.1859m	0.1914m	0.2116m	0.2064m	0.2062m	AVRG		5.04732		0.1981	12	15	0.05	0.99	
Chloroethane		0.1683m	0.2004m	0.1944m	0.1673m	0.1695m	0.1668m	0.1636m	0.1579m	AVRG		5.76307		0.1735	9	15	0.05	0.99	
Trichlorofluoromethane		0.2472	0.3436	0.3357	0.3332	0.3443	0.3451	0.3376	0.3208	AVRG		3.06810		0.3259	10	15	0.05	0.99	
Acetone			0.0974	0.0900	0.0815	0.0868	0.0861	0.0923	0.0999	AVRG		11.0425		0.0906	7	15	0.05	0.99	
1,1-Dichloroethene		0.1699m	0.2263m	0.2366	0.2281	0.2083	0.2291	0.2172	0.2273	AVRG		4.59046		0.2178	10	15	0.05	0.99	
Iodomethane		0.2109m	0.1601m	0.1934m	0.1935m	0.2013	0.2259	0.2385	0.2387	AVRG		4.81268		0.2078	13	15	0.05	0.99	
Methylene Chloride		0.3831m	0.3660m	0.3453m	0.3114m	0.2965m	0.2850	0.2877	0.2842	AVRG		3.12591		0.3199	12	15	0.05	0.99	
Carbon Disulfide		0.6980	1.0146	0.9690	0.8853	0.8285	0.8505	0.7946	0.8188	AVRG		1.16631		0.8574	12	15	0.05	0.99	
MTBE		0.6554	0.7078	0.7233	0.7199	0.7367	0.7275	0.7132	0.6902	AVRG		1.40994		0.7092	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.2468m	0.2893	0.2841	0.2648	0.2516	0.2563	0.2408	0.2471	AVRG		3.84452		0.2601	7	15	0.05	0.99	
Vinyl Acetate		0.2211	0.3097	0.2822	0.4601	0.2254m	0.4306	0.2698	0.1441	AVRG		3.41428		0.2929	**36**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.4219	0.5014	0.4998	0.4467	0.4379	0.4244	0.4016	0.4091	AVRG		2.25802		0.4429	9	15	0.10	0.99	
2-Butanone			0.1179	0.1100	0.1032	0.1066	0.1040	0.1073	0.1048	AVRG		9.28610		0.1077	5	15	0.05	0.99	
2,2-Dichloropropane		0.2300	0.3164	0.3087	0.3206	0.2653	0.2623	0.2439	0.2571	AVRG		3.62930		0.2755	13	15	0.05	0.99	
cis-1,2-Dichloroethene		0.2659	0.3176	0.3156	0.2907	0.2878	0.2799	0.2730	0.2681	AVRG		3.48032		0.2873	7	15	0.05	0.99	
Chloroform		0.5253	0.5202	0.5072	0.4593	0.4427	0.4258	0.3992	0.3950	AVRG		2.17702		0.4593	11	15	0.05	0.99	
Bromochloromethane		0.1384	0.1495	0.1543	0.1448	0.1489	0.1476	0.1370	0.1310	AVRG		6.94825		0.1439	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.2831	0.3677	0.3507	0.3413	0.2994	0.3200	0.2900	0.3093	AVRG		3.12318		0.3202	9	15	0.05	0.99	
1,1-Dichloropropene		0.2089	0.2776	0.2654	0.2510	0.2228	0.2347	0.2017	0.2182	AVRG		4.25456		0.2350	12	15	0.05	0.99	
Carbon Tetrachloride		0.1726	0.2080	0.1948	0.1938	0.1712	0.1882	0.1603	0.1785	AVRG		5.45142		0.1834	8	15	0.05	0.99	
1,2-Dichloroethane		0.2158	0.2289	0.2304	0.2248	0.2304	0.2283	0.2204	0.2152	AVRG		4.45885		0.2243	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		0.7284	0.7534	0.7877	0.6968	0.6757	0.6417	0.5652	0.5366	AVRG		1.48546		0.6732	13	15	0.05	0.99	
Trichloroethene		0.1751	0.2047	0.2072	0.1859	0.1909	0.1780	0.1720	0.1830	AVRG		5.34507		0.1871	7	15	0.05	0.99	
1,2-Dichloropropane		0.1819	0.1814m	0.1926	0.1806	0.1809	0.1738	0.1649	0.1635	AVRG		5.63522		0.1775	5	15	0.05	0.99	
Bromodichloromethane		0.2229	0.2479	0.2549	0.2451	0.2474	0.2455	0.2347	0.2275	AVRG		4.15420		0.2407	5	15	0.05	0.99	
Dibromomethane		0.1229	0.1350	0.1390	0.1351	0.1365	0.1360	0.1302	0.1281	AVRG		7.52691		0.1329	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.1378	0.1501	0.1471	0.1612	0.1632	0.1619	0.1600	AVRG		6.47384		0.1545	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.2453	0.2773	0.2791	0.2810	0.2811	0.2754	0.2615	0.2594	AVRG		3.70343		0.2700	5	15	0.05	0.99	
Toluene		0.5221	0.6022	0.6115	0.5382	0.5279	0.5323	0.4729	0.4762	AVRG		1.86768		0.5354	9	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2715	0.3034	0.3241	0.3264	0.3326	0.3353	0.3231	0.3127	AVRG		3.16308		0.3161	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1073	0.1142	0.1223	0.1199	0.1223	0.1209	0.1132	0.1139	AVRG		8.56460		0.1168	5	15	0.05	0.99	
2-Hexanone			0.1220	0.1260	0.1244	0.1404	0.1422	0.1442	0.1401	AVRG		7.45195		0.1342	7	15	0.05	0.99	
1,3-Dichloropropane		0.3194	0.3536	0.3660	0.3489	0.3582	0.3605	0.3347	0.3246	AVRG		2.89240		0.3457	5	15	0.05	0.99	
Tetrachloroethene		0.1942	0.2680	0.2619	0.2374	0.2216	0.2368	0.1968	0.2253	AVRG		4.34300		0.2303	12	15	0.05	0.99	
Dibromochloromethane		0.2008	0.2225	0.2389	0.2354	0.2481	0.2546	0.2402	0.2373	AVRG		4.26018		0.2347	7	15	0.05	0.99	
1,2-Dibromoethane		0.1934	0.2210	0.2267	0.2225	0.2298	0.2303	0.2176	0.2160	AVRG		4.55254		0.2197	5	15	0.05	0.99	
Chlorobenzene		0.5952	0.6472	0.6332	0.5913	0.5749	0.5612	0.5127	0.5044	AVRG		1.73160		0.5775	9	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2020	0.2200	0.2192	0.2154	0.2161	0.2120	0.1976	0.1961	AVRG		4.76677		0.2098	5	15	0.05	0.99	
Ethylbenzene		0.9995	1.1703	1.1383	1.0453	0.9780	0.9432	0.7950	0.7944	AVRG		1.01729		0.9830	14	15	0.05	0.99	
m,p-Xylenes	0.3703	0.3643	0.4178	0.4074	0.3794	0.3569	0.3452	0.2797	0.2679	AVRG		2.82224		0.3543	14	15	0.05	0.99	
o-Xylene		0.3437	0.3828	0.4083	0.3761	0.3628	0.3614	0.3191	0.3160	AVRG		2.78729		0.3588	9	15	0.05	0.99	
Styrene		0.5696	0.6639	0.6778	0.6162	0.6328	0.6077	0.5470	0.5161	AVRG		1.65597		0.6039	9	15	0.05	0.99	
Bromoform		0.1438	0.1529	0.1732	0.1629	0.1763	0.1828	0.1786	0.1783	AVRG		5.93139		0.1686	8	15	0.10	0.99	
Isopropylbenzene		1.3572	1.7661	1.7999	1.6966	1.5645	1.5355	1.2464	1.3381	AVRG		0.65019		1.5380	14	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.4370	0.4681	0.4833	0.5074	0.4800	0.5073	0.4627	0.4211	AVRG		2.12375		0.4709	7	15	0.30	0.99	
1,2,3-Trichloropropane		0.1155	0.1227	0.1218	0.1161	0.1334	0.1296	0.1267	0.1261	AVRG		8.06509		0.1240	5	15	0.05	0.99	
Propylbenzene		1.8208	2.2128	2.1790	2.0700	1.8543	1.7713	1.3998		AVRG		0.52600		1.9011	15	15	0.05	0.99	
Bromobenzene		0.5048	0.5064	0.5198	0.4861	0.5101	0.4958	0.4390	0.4052	AVRG		2.06867		0.4834	8	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.0780	1.3398	1.3365	1.2225	1.1590	1.1275	0.9340	0.9349	AVRG		0.87603		1.1415	14	15	0.05	0.99	
2-Chlorotoluene		1.2870	1.4926	1.5051	1.3575	1.3199	1.2199	1.0508	1.0176	AVRG		0.78046		1.2813	14	15	0.05	0.99	
4-Chlorotoluene		1.1990	1.3505	1.3578	1.2892	1.2330	1.1863	1.0646	1.0896	AVRG		0.81884		1.2212	9	15	0.05	0.99	
tert-Butylbenzene		0.8110	1.0938	1.1203	1.0554	0.9396	0.9915	0.8204	0.9202	AVRG		1.03195		0.9690	12	15	0.05	0.99	
1,2,4-Trimethylbenzene		1.0586	1.1600	1.2280	1.1506	1.0854	1.1039	0.9926	1.0317	AVRG		0.90798		1.1014	7	15	0.05	0.99	
sec-Butylbenzene		1.1889	1.5824	1.5850	1.5618	1.3170	1.4232	1.1318	1.2763	AVRG		0.72292		1.3833	13	15	0.05	0.99	
para-Isopropyl Toluene	1.1087	0.9190	0.7081m	1.1902	1.1512	1.0174	1.0965	0.8978	1.0250	AVRG		0.98751		1.0126	15	15	0.05	0.99	
1,3-Dichlorobenzene		0.8011	0.8557	0.8874	0.8231	0.8164	0.7839	0.7107	0.7287	AVRG		1.24865		0.8009	7	15	0.05	0.99	
1,4-Dichlorobenzene		0.8895	0.8700	0.8831	0.8039	0.8145	0.7792	0.7169	0.7133	AVRG		1.23640		0.8088	9	15	0.05	0.99	
n-Butylbenzene		0.7991	0.9655	0.9698	0.9750	0.8194	0.9124	0.7639	0.8850	AVRG		1.12836		0.8862	9	15	0.05	0.99	
1,2-Dichlorobenzene		0.7602	0.8186	0.8197	0.7692	0.7851	0.7532	0.7167	0.7243	AVRG		1.30147		0.7684	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0764m	0.0664m	0.0705m	0.0758	0.0778	0.0827	0.0826	0.0839	AVRG		12.9881		0.0770	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.2607	0.2350	0.2571	0.2492	0.2380	0.2637	0.2522	0.2883	AVRG		3.91365		0.2555	7	15	0.05	0.99	
Hexachlorobutadiene		0.0778	0.0750	0.0861	0.0797	0.0726	0.0802	0.0667	0.0906	AVRG		12.7226		0.0786	10	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		0.6621	0.6514	0.6812	0.6823	0.6881	0.7174	0.7071	0.7483	AVRG		1.44465		0.6922	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.2345	0.2239	0.2270	0.2295	0.2345	0.2516	0.2428	0.2688	AVRG		4.18272		0.2391	6	15	0.05	0.99	
Dibromofluoromethane	0.5059	0.5179	0.5296	0.5290	0.5324	0.5220	0.5278	0.5280	0.5246	AVRG		1.90786		0.5241	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3380	0.3396	0.3387	0.3404	0.3360	0.3274	0.3212	0.3093	0.3035	AVRG		3.04660		0.3282	4	15	0.05	0.99	
Toluene-d8	1.2284	1.2499	1.2638	1.2532	1.2441	1.2455	1.2703	1.2548	1.2618	AVRG		0.79845		1.2524	1	15	0.05	0.99	
Bromofluorobenzene	0.8615	0.8726	0.8620	0.8830	0.8889	0.8925	0.8782	0.8626	0.8385	AVRG		1.14800		0.8711	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-24	2.000	5	5.000	2	10.00	2	20.00	5	50.00	10	75.00	4	100.0	-4
Chloromethane			1.000	2	2.000	18	5.000	13	10.00	-2	20.00	-4	50.00	-5	75.00	-8	100.0	-14
Vinyl Chloride	0.500	-16	1.000	-16	2.000	15	5.000	12	10.00	2	20.00	4	50.00	5	75.00	1	100.0	-6
Bromomethane			1.000	-25	2.000	7	5.000	12	10.00	-6	20.00	-3	50.00	7	75.00	4	100.0	4
Chloroethane			1.000	-3	2.000	15	5.000	12	10.00	-4	20.00	-2	50.00	-4	75.00	-6	100.0	-9
Trichlorofluoromethane			1.000	-24	2.000	5	5.000	3	10.00	2	20.00	6	50.00	6	75.00	4	100.0	-2
Acetone					2.000	8	5.000	-1	10.00	-10	20.00	-4	50.00	-5	75.00	2	100.0	10
1,1-Dichloroethene			0.500	-22	2.000	4	5.000	9	10.00	5	20.00	-4	50.00	5	75.00	0	100.0	4
Iodomethane			0.500	2	2.000	-23	5.000	-7	10.00	-7	20.00	-3	50.00	9	75.00	15	100.0	15
Methylene Chloride			0.500	20	2.000	14	5.000	8	10.00	-3	20.00	-7	50.00	-11	75.00	-10	100.0	-11
Carbon Disulfide			0.500	-19	2.000	18	5.000	13	10.00	3	20.00	-3	50.00	-1	75.00	-7	100.0	-5
MTBE			0.500	-8	2.000	0	5.000	2	10.00	2	20.00	4	50.00	3	75.00	1	100.0	-3
trans-1,2-Dichloroethene			0.500	-5	2.000	11	5.000	9	10.00	2	20.00	-3	50.00	-1	75.00	-7	100.0	-5
Vinyl Acetate			0.500	-24	2.000	6	5.000	-4	10.00	57	20.00	-23	50.00	47	75.00	-8	100.0	-51
1,1-Dichloroethane			0.500	-5	2.000	13	5.000	13	10.00	1	20.00	-1	50.00	-4	75.00	-9	100.0	-8
2-Butanone					2.000	10	5.000	2	10.00	-4	20.00	-1	50.00	-3	75.00	0	100.0	-3
2,2-Dichloropropane			0.500	-17	2.000	15	5.000	12	10.00	16	20.00	-4	50.00	-5	75.00	-11	100.0	-7
cis-1,2-Dichloroethene			0.500	-7	2.000	11	5.000	10	10.00	1	20.00	0	50.00	-3	75.00	-5	100.0	-7
Chloroform			0.500	14	2.000	13	5.000	10	10.00	0	20.00	-4	50.00	-7	75.00	-13	100.0	-14
Bromochloromethane			0.500	-4	2.000	4	5.000	7	10.00	1	20.00	3	50.00	3	75.00	-5	100.0	-9
1,1,1-Trichloroethane			0.500	-12	2.000	15	5.000	10	10.00	7	20.00	-6	50.00	0	75.00	-9	100.0	-3
1,1-Dichloropropene			0.500	-11	2.000	18	5.000	13	10.00	7	20.00	-5	50.00	0	75.00	-14	100.0	-7
Carbon Tetrachloride			0.500	-6	2.000	13	5.000	6	10.00	6	20.00	-7	50.00	3	75.00	-13	100.0	-3
1,2-Dichloroethane			0.500	-4	2.000	2	5.000	3	10.00	0	20.00	3	50.00	2	75.00	-2	100.0	-4
Benzene			0.500	8	2.000	12	5.000	17	10.00	4	20.00	0	50.00	-5	75.00	-16	100.0	-20
Trichloroethene			0.500	-6	2.000	9	5.000	11	10.00	-1	20.00	2	50.00	-5	75.00	-8	100.0	-2
1,2-Dichloropropane			0.500	2	2.000	2	5.000	9	10.00	2	20.00	2	50.00	-2	75.00	-7	100.0	-8
Bromodichloromethane			0.500	-7	2.000	3	5.000	6	10.00	2	20.00	3	50.00	2	75.00	-2	100.0	-6
Dibromomethane			0.500	-8	2.000	2	5.000	5	10.00	2	20.00	3	50.00	2	75.00	-2	100.0	-4
4-Methyl-2-Pentanone					2.000	-11	5.000	-3	10.00	-5	20.00	4	50.00	6	75.00	5	100.0	4
cis-1,3-Dichloropropene			0.500	-9	2.000	3	5.000	3	10.00	4	20.00	4	50.00	2	75.00	-3	100.0	-4
Toluene			0.500	-2	2.000	12	5.000	14	10.00	1	20.00	-1	50.00	-1	75.00	-12	100.0	-11
trans-1,3-Dichloropropene			0.500	-14	2.000	-4	5.000	3	10.00	3	20.00	5	50.00	6	75.00	2	100.0	-1
1,1,2-Trichloroethane			0.500	-8	2.000	-2	5.000	5	10.00	3	20.00	5	50.00	4	75.00	-3	100.0	-2
2-Hexanone					2.000	-9	5.000	-6	10.00	-7	20.00	5	50.00	6	75.00	7	100.0	4
1,3-Dichloropropane			0.500	-8	2.000	2	5.000	6	10.00	1	20.00	4	50.00	4	75.00	-3	100.0	-6
Tetrachloroethene			0.500	-16	2.000	16	5.000	14	10.00	3	20.00	-4	50.00	3	75.00	-15	100.0	-2
Dibromochloromethane			0.500	-14	2.000	-5	5.000	2	10.00	0	20.00	6	50.00	8	75.00	2	100.0	1
1,2-Dibromoethane			0.500	-12	2.000	1	5.000	3	10.00	1	20.00	5	50.00	5	75.00	-1	100.0	-2
Chlorobenzene			0.500	3	2.000	12	5.000	10	10.00	2	20.00	0	50.00	-3	75.00	-11	100.0	-13
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	5	5.000	5	10.00	3	20.00	3	50.00	1	75.00	-6	100.0	-7
Ethylbenzene			0.500	2	2.000	19	5.000	16	10.00	6	20.00	-1	50.00	-4	75.00	-19	100.0	-19

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	5	1.000	3	4.000	18	10.00	15	20.00	7	40.00	1	100.0	-3	150.0	-21	200.0	-24
o-Xylene			0.500	-4	2.000	7	5.000	14	10.00	5	20.00	1	50.00	1	75.00	-11	100.0	-12
Styrene			0.500	-6	2.000	10	5.000	12	10.00	2	20.00	5	50.00	1	75.00	-9	100.0	-15
Bromoform			0.500	-15	2.000	-9	5.000	3	10.00	-3	20.00	5	50.00	8	75.00	6	100.0	6
Isopropylbenzene			0.500	-12	2.000	15	5.000	17	10.00	10	20.00	2	50.00	0	75.00	-19	100.0	-13
1,1,2,2-Tetrachloroethane			0.500	-7	2.000	-1	5.000	3	10.00	8	20.00	2	50.00	8	75.00	-2	100.0	-11
1,2,3-Trichloropropane			0.500	-7	2.000	-1	5.000	-2	10.00	-6	20.00	8	50.00	5	75.00	2	100.0	2
Propylbenzene			0.500	-4	2.000	16	5.000	15	10.00	9	20.00	-2	50.00	-7	75.00	-26		
Bromobenzene			0.500	4	2.000	5	5.000	8	10.00	1	20.00	6	50.00	3	75.00	-9	100.0	-16
1,3,5-Trimethylbenzene			0.500	-6	2.000	17	5.000	17	10.00	7	20.00	2	50.00	-1	75.00	-18	100.0	-18
2-Chlorotoluene			0.500	0	2.000	16	5.000	17	10.00	6	20.00	3	50.00	-5	75.00	-18	100.0	-21
4-Chlorotoluene			0.500	-2	2.000	11	5.000	11	10.00	6	20.00	1	50.00	-3	75.00	-13	100.0	-11
tert-Butylbenzene			0.500	-16	2.000	13	5.000	16	10.00	9	20.00	-3	50.00	2	75.00	-15	100.0	-5
1,2,4-Trimethylbenzene			0.500	-4	2.000	5	5.000	11	10.00	4	20.00	-1	50.00	0	75.00	-10	100.0	-6
sec-Butylbenzene			0.500	-14	2.000	14	5.000	15	10.00	13	20.00	-5	50.00	3	75.00	-18	100.0	-8
para-Isopropyl Toluene	0.250	9	0.500	-9	2.000	-30	5.000	18	10.00	14	20.00	0	50.00	8	75.00	-11	100.0	1
1,3-Dichlorobenzene			0.500	0	2.000	7	5.000	11	10.00	3	20.00	2	50.00	-2	75.00	-11	100.0	-9
1,4-Dichlorobenzene			0.500	10	2.000	8	5.000	9	10.00	-1	20.00	1	50.00	-4	75.00	-11	100.0	-12
n-Butylbenzene			0.500	-10	2.000	9	5.000	9	10.00	10	20.00	-8	50.00	3	75.00	-14	100.0	0
1,2-Dichlorobenzene			0.500	-1	2.000	7	5.000	7	10.00	0	20.00	2	50.00	-2	75.00	-7	100.0	-6
1,2-Dibromo-3-Chloropropane			0.500	-1	2.000	-14	5.000	-8	10.00	-2	20.00	1	50.00	7	75.00	7	100.0	9
1,2,4-Trichlorobenzene			0.500	2	2.000	-8	5.000	1	10.00	-2	20.00	-7	50.00	3	75.00	-1	100.0	13
Hexachlorobutadiene			0.500	-1	2.000	-5	5.000	10	10.00	1	20.00	-8	50.00	2	75.00	-15	100.0	15
Naphthalene			0.500	-4	2.000	-6	5.000	-2	10.00	-1	20.00	-1	50.00	4	75.00	2	100.0	8
1,2,3-Trichlorobenzene			0.500	-2	2.000	-6	5.000	-5	10.00	-4	20.00	-2	50.00	5	75.00	2	100.0	12
Dibromofluoromethane	50.00	-3	50.00	-1	50.00	1	50.00	1	50.00	2	50.00	0	50.00	1	50.00	1	50.00	0
1,2-Dichloroethane-d4	50.00	3	50.00	3	50.00	3	50.00	4	50.00	2	50.00	0	50.00	-2	50.00	-6	50.00	-8
Toluene-d8	50.00	-2	50.00	0	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	1	50.00	0	50.00	1
Bromofluorobenzene	50.00	-1	50.00	0	50.00	-1	50.00	1	50.00	2	50.00	2	50.00	1	50.00	-1	50.00	-4

BO 08/10/09 : All manual integrations made due to fronting/tailing of peaks, combining split peaks, separating from co-eluting peaks, or fixing baseline.

LW 08/10/09 [Acetone]: Does not meet minimum RF criteria for 8260C

LW 08/10/09 [Trichloroethene]: Does not meet minimum RF criteria for 8260C

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 479315844001 Cal Date : 07-AUG-2009 Type : WATER

ICV 479315844021 (hh721 07-AUG-2009) stds: S12589 (10000X), S12587 (10000X), S12258 (10000X), S12562 (5000X)
ICV 479320168007 (hha07 10-AUG-2009) stds: S12672 (10000X), S12562 (5000X)

Analyte	ICV Seqnum	Date	Spiked	Quant	Units	%D	Max	Flags
Freon 12	479320168007	10-AUG-2009	25.00	21.93	ug/L	-12	25	m
Chloromethane	479320168007	10-AUG-2009	25.00	22.84	ug/L	-9	25	
Vinyl Chloride	479320168007	10-AUG-2009	25.00	25.48	ug/L	2	25	m
Bromomethane	479320168007	10-AUG-2009	25.00	18.79	ug/L	**-25**	25	m
Chloroethane	479320168007	10-AUG-2009	25.00	23.42	ug/L	-6	25	m
Trichlorofluoromethane	479320168007	10-AUG-2009	25.00	25.06	ug/L	0	25	
Acetone	479315844021	07-AUG-2009	25.00	23.70	ug/L	-5	25	
1,1-Dichloroethene	479315844021	07-AUG-2009	25.00	28.88	ug/L	16	25	
Iodomethane	479315844021	07-AUG-2009	25.00	13.01	ug/L	**-48**	25	v-
Methylene Chloride	479315844021	07-AUG-2009	25.00	25.48	ug/L	2	25	
Carbon Disulfide	479315844021	07-AUG-2009	25.00	26.74	ug/L	7	25	
MTBE	479315844021	07-AUG-2009	25.00	25.94	ug/L	4	25	
trans-1,2-Dichloroethene	479315844021	07-AUG-2009	25.00	28.32	ug/L	13	25	
Vinyl Acetate	479315844021	07-AUG-2009	25.00	25.80	ug/L	3	25	
1,1-Dichloroethane	479315844021	07-AUG-2009	25.00	27.94	ug/L	12	25	
2-Butanone	479315844021	07-AUG-2009	25.00	26.33	ug/L	5	25	
2,2-Dichloropropane	479315844021	07-AUG-2009	25.00	28.54	ug/L	14	25	
cis-1,2-Dichloroethene	479315844021	07-AUG-2009	25.00	27.33	ug/L	9	25	
Chloroform	479315844021	07-AUG-2009	25.00	27.15	ug/L	9	25	
Bromochloromethane	479315844021	07-AUG-2009	25.00	28.25	ug/L	13	25	
1,1,1-Trichloroethane	479315844021	07-AUG-2009	25.00	29.15	ug/L	17	25	
1,1-Dichloropropene	479315844021	07-AUG-2009	25.00	29.50	ug/L	18	25	
Carbon Tetrachloride	479315844021	07-AUG-2009	25.00	30.19	ug/L	**21**	25	
1,2-Dichloroethane	479315844021	07-AUG-2009	25.00	29.11	ug/L	16	25	
Benzene	479315844021	07-AUG-2009	25.00	28.41	ug/L	14	25	
Trichloroethene	479315844021	07-AUG-2009	25.00	27.98	ug/L	12	25	
1,2-Dichloropropane	479315844021	07-AUG-2009	25.00	27.76	ug/L	11	25	
Bromodichloromethane	479315844021	07-AUG-2009	25.00	29.28	ug/L	17	25	
Dibromomethane	479315844021	07-AUG-2009	25.00	28.35	ug/L	13	25	
4-Methyl-2-Pentanone	479315844021	07-AUG-2009	25.00	28.39	ug/L	14	25	
cis-1,3-Dichloropropene	479315844021	07-AUG-2009	25.00	30.38	ug/L	**22**	25	
Toluene	479315844021	07-AUG-2009	25.00	28.06	ug/L	12	25	
trans-1,3-Dichloropropene	479315844021	07-AUG-2009	25.00	27.28	ug/L	9	25	
1,1,2-Trichloroethane	479315844021	07-AUG-2009	25.00	29.07	ug/L	16	25	
2-Hexanone	479315844021	07-AUG-2009	25.00	28.02	ug/L	12	25	
1,3-Dichloropropane	479315844021	07-AUG-2009	25.00	29.39	ug/L	18	25	
Tetrachloroethene	479315844021	07-AUG-2009	25.00	28.09	ug/L	12	25	
Dibromochloromethane	479315844021	07-AUG-2009	25.00	28.93	ug/L	16	25	
1,2-Dibromoethane	479315844021	07-AUG-2009	25.00	28.18	ug/L	13	25	
Chlorobenzene	479315844021	07-AUG-2009	25.00	27.20	ug/L	9	25	
1,1,1,2-Tetrachloroethane	479315844021	07-AUG-2009	25.00	27.95	ug/L	12	25	
Ethylbenzene	479315844021	07-AUG-2009	25.00	28.72	ug/L	15	25	
m,p-Xylenes	479315844021	07-AUG-2009	50.00	57.17	ug/L	14	25	
o-Xylene	479315844021	07-AUG-2009	25.00	28.53	ug/L	14	25	
Styrene	479315844021	07-AUG-2009	25.00	28.91	ug/L	16	25	
Bromoform	479315844021	07-AUG-2009	25.00	28.53	ug/L	14	25	
Isopropylbenzene	479315844021	07-AUG-2009	25.00	25.23	ug/L	1	25	

Analyte	ICV Seqnum	Date	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	479315844021	07-AUG-2009	25.00	27.99	ug/L	12	25	
1,2,3-Trichloropropane	479315844021	07-AUG-2009	25.00	27.32	ug/L	9	25	
Propylbenzene	479315844021	07-AUG-2009	25.00	28.28	ug/L	13	25	
Bromobenzene	479315844021	07-AUG-2009	25.00	28.67	ug/L	15	25	
1,3,5-Trimethylbenzene	479315844021	07-AUG-2009	25.00	29.04	ug/L	16	25	
2-Chlorotoluene	479315844021	07-AUG-2009	25.00	28.50	ug/L	14	25	
4-Chlorotoluene	479315844021	07-AUG-2009	25.00	27.65	ug/L	11	25	
tert-Butylbenzene	479315844021	07-AUG-2009	25.00	28.76	ug/L	15	25	
1,2,4-Trimethylbenzene	479315844021	07-AUG-2009	25.00	28.36	ug/L	13	25	
sec-Butylbenzene	479315844021	07-AUG-2009	25.00	29.41	ug/L	18	25	
para-Isopropyl Toluene	479315844021	07-AUG-2009	25.00	29.04	ug/L	16	25	
1,3-Dichlorobenzene	479315844021	07-AUG-2009	25.00	27.25	ug/L	9	25	
1,4-Dichlorobenzene	479315844021	07-AUG-2009	25.00	27.04	ug/L	8	25	
n-Butylbenzene	479315844021	07-AUG-2009	25.00	28.82	ug/L	15	25	
1,2-Dichlorobenzene	479315844021	07-AUG-2009	25.00	27.35	ug/L	9	25	
1,2-Dibromo-3-Chloropropane	479315844021	07-AUG-2009	25.00	28.61	ug/L	14	25	
1,2,4-Trichlorobenzene	479315844021	07-AUG-2009	25.00	27.31	ug/L	9	25	
Hexachlorobutadiene	479315844021	07-AUG-2009	25.00	28.19	ug/L	13	25	
Naphthalene	479315844021	07-AUG-2009	25.00	27.94	ug/L	12	25	
1,2,3-Trichlorobenzene	479315844021	07-AUG-2009	25.00	28.12	ug/L	12	25	

-=low bias m=manual integration v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214846 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 IDF : 1.0
Seqnum : 479385171005.1 File : hio05 Time : 24-SEP-2009 13:41
Cal : 479315844001 Caldate : 07-AUG-2009 Caltype : WATER
Standards: S12996 (11760X), S12693 (11760X), S12923 (11760X), S12921 (5000X), S12845 (11760X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3705	0.3305	21.25	18.95	ug/L	-11	20	0.0500	m
Chloromethane	0.3570	0.3692	21.25	21.98	ug/L	3	20	0.1000	m
Vinyl Chloride	0.3158	0.2961	21.25	19.92	ug/L	-6	20	0.0500	m
Bromomethane	0.1981	0.0893	21.25	9.576	ug/L	**-55**	20	0.0500	c- m ***
Chloroethane	0.1735	0.1714	21.25	20.99	ug/L	-1	20	0.0500	m
Trichlorofluoromethane	0.3259	0.2969	21.25	19.36	ug/L	-9	20	0.0500	
Acetone	0.0906	0.1060	21.25	24.88	ug/L	17	20	0.0500	
1,1-Dichloroethene	0.2178	0.2094	21.25	20.42	ug/L	-4	20	0.0500	
Iodomethane	0.2078	0.1294	21.25	13.23	ug/L	**-38**	20	0.0500	c- ***
Methylene Chloride	0.3199	0.2909	21.25	19.33	ug/L	-9	20	0.0500	
Carbon Disulfide	0.8574	0.7684	21.25	19.05	ug/L	-10	20	0.0500	
MTBE	0.7092	0.6905	21.25	20.69	ug/L	-3	20	0.0500	
trans-1,2-Dichloroethene	0.2601	0.2577	21.25	21.05	ug/L	-1	20	0.0500	
Vinyl Acetate	0.2929	0.5277	21.25	38.29	ug/L	**80**	20	0.0500	c+ rsd ***
1,1-Dichloroethane	0.4429	0.4727	21.25	22.68	ug/L	7	20	0.1000	
2-Butanone	0.1077	0.1446	21.25	28.53	ug/L	**34**	20	0.0500	c+ ***
2,2-Dichloropropane	0.2755	0.3377	21.25	26.04	ug/L	**23**	20	0.0500	c+ ***
cis-1,2-Dichloroethene	0.2873	0.2791	21.25	20.64	ug/L	-3	20	0.0500	
Chloroform	0.4593	0.4515	21.25	20.89	ug/L	-2	20	0.0500	
Bromochloromethane	0.1439	0.1468	21.25	21.67	ug/L	2	20	0.0500	
1,1,1-Trichloroethane	0.3202	0.3218	21.25	21.36	ug/L	0	20	0.0500	
1,1-Dichloropropene	0.2350	0.2478	21.25	22.40	ug/L	5	20	0.0500	
Carbon Tetrachloride	0.1834	0.1911	21.25	22.14	ug/L	4	20	0.0500	
1,2-Dichloroethane	0.2243	0.2620	21.25	24.83	ug/L	17	20	0.0500	
Benzene	0.6732	0.6780	21.25	21.40	ug/L	1	20	0.0500	
Trichloroethene	0.1871	0.1771	21.25	20.11	ug/L	-5	20	0.0500	
1,2-Dichloropropane	0.1775	0.1965	21.25	23.53	ug/L	11	20	0.0500	
Bromodichloromethane	0.2407	0.2497	21.25	22.04	ug/L	4	20	0.0500	
Dibromomethane	0.1329	0.1370	21.25	21.91	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.1545	0.2085	21.25	28.68	ug/L	**35**	20	0.0500	c+ ***
cis-1,3-Dichloropropene	0.2700	0.3129	21.25	24.63	ug/L	16	20	0.0500	
Toluene	0.5354	0.5284	21.25	20.97	ug/L	-1	20	0.0500	
trans-1,3-Dichloropropene	0.3161	0.3258	21.25	21.90	ug/L	3	20	0.0500	
1,1,2-Trichloroethane	0.1168	0.1188	21.25	21.62	ug/L	2	20	0.0500	
2-Hexanone	0.1342	0.1811	21.25	28.68	ug/L	**35**	20	0.0500	c+ ***
1,3-Dichloropropane	0.3457	0.3767	21.25	23.15	ug/L	9	20	0.0500	
Tetrachloroethene	0.2303	0.2279	21.25	21.04	ug/L	-1	20	0.0500	
Dibromochloromethane	0.2347	0.2409	21.25	21.81	ug/L	3	20	0.0500	
1,2-Dibromoethane	0.2197	0.2296	21.25	22.21	ug/L	5	20	0.0500	
Chlorobenzene	0.5775	0.5773	21.25	21.24	ug/L	0	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2098	0.2151	21.25	21.79	ug/L	3	20	0.0500	
Ethylbenzene	0.9830	1.0067	21.25	21.76	ug/L	2	20	0.0500	
m,p-Xylenes	0.3543	0.3747	42.50	44.94	ug/L	6	20	0.0500	
o-Xylene	0.3588	0.3747	21.25	22.20	ug/L	4	20	0.0500	
Styrene	0.6039	0.6507	21.25	22.90	ug/L	8	20	0.0500	
Bromoform	0.1686	0.1577	21.25	19.88	ug/L	-6	20	0.1000	
Isopropylbenzene	1.5380	1.3900	21.25	19.21	ug/L	-10	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.4709	0.5085	21.25	22.95	ug/L	8	20	0.3000	
1,2,3-Trichloropropane	0.1240	0.1314	21.25	22.52	ug/L	6	20	0.0500	
Propylbenzene	1.9011	1.9576	21.25	21.88	ug/L	3	20	0.0500	
Bromobenzene	0.4834	0.4825	21.25	21.21	ug/L	0	20	0.0500	
1,3,5-Trimethylbenzene	1.1415	1.2427	21.25	23.13	ug/L	9	20	0.0500	
2-Chlorotoluene	1.2813	1.3355	21.25	22.15	ug/L	4	20	0.0500	
4-Chlorotoluene	1.2212	1.2379	21.25	21.54	ug/L	1	20	0.0500	
tert-Butylbenzene	0.9690	1.0882	21.25	23.86	ug/L	12	20	0.0500	
1,2,4-Trimethylbenzene	1.1014	1.1428	21.25	22.05	ug/L	4	20	0.0500	
sec-Butylbenzene	1.3833	1.5543	21.25	23.88	ug/L	12	20	0.0500	
para-Isopropyl Toluene	1.0126	1.1494	21.25	24.12	ug/L	14	20	0.0500	
1,3-Dichlorobenzene	0.8009	0.8245	21.25	21.88	ug/L	3	20	0.0500	
1,4-Dichlorobenzene	0.8088	0.8192	21.25	21.52	ug/L	1	20	0.0500	
n-Butylbenzene	0.8862	1.0200	21.25	24.46	ug/L	15	20	0.0500	
1,2-Dichlorobenzene	0.7684	0.7983	21.25	22.08	ug/L	4	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0770	0.0829	21.25	22.88	ug/L	8	20	0.0500	
1,2,4-Trichlorobenzene	0.2555	0.3068	21.25	25.51	ug/L	20	20	0.0500	
Hexachlorobutadiene	0.0786	0.1155	21.25	31.23	ug/L	**47**	20	0.0500	c+ ***
Naphthalene	0.6922	0.8804	21.25	27.03	ug/L	**27**	20	0.0500	c+ ***
1,2,3-Trichlorobenzene	0.2391	0.2830	21.25	25.15	ug/L	18	20	0.0500	
Dibromofluoromethane	0.5241	0.5246	50.00	50.05	ug/L	0	20	0.0500	
1,2-Dichloroethane-d4	0.3282	0.3587	50.00	54.64	ug/L	9	20	0.0500	
Toluene-d8	1.2524	1.2793	50.00	51.07	ug/L	2	20	0.0500	
Bromofluorobenzene	0.8711	0.9148	50.00	52.51	ug/L	5	20	0.0500	

ISTD (ICAL hh717)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	3906633	3609929	-7.59	10.15	10.15	0.00
1,4-Difluorobenzene	5415536	5079413	-6.21	11.27	11.27	0.00
Chlorobenzene-d5	4238599	4075229	-3.85	15.29	15.29	0.00
1,4-Dichlorobenzene-d4	2330596	2352264	0.93	18.00	17.99	-0.01

TEW 09/24/09 [Freon 12]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Chloromethane]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Vinyl Chloride]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Bromomethane]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Chloroethane]: Corrected fronting or tailing peak integration . [general version]

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/28/09

+=high bias -=low bias c=CCV m=manual integration rsd=ICAL %RSD failure

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : QC513532 IDF : 1.0
Seqnum : 479385171014.4 File : hio14 Time : 24-SEP-2009 18:34
Cal : 479315844001 Caldate : 07-AUG-2009 Caltype : WATER
Standards: S12996 (11760X), S12693 (11760X), S12925 (11760X), S12921 (5000X), S12845 (11760X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3705	0.3767	21.25	21.60	ug/L	2	20	0.0500	m u
Chloromethane	0.3570	0.3988	21.25	23.74	ug/L	12	20	0.1000	m u
Vinyl Chloride	0.3158	0.3084	21.25	20.75	ug/L	-2	20	0.0500	m u
Bromomethane	0.1981	0.1141	21.25	12.23	ug/L	**-42**	20	0.0500	c- m u ***
Chloroethane	0.1735	0.1710	21.25	20.95	ug/L	-1	20	0.0500	m u
Trichlorofluoromethane	0.3259	0.2977	21.25	19.41	ug/L	-9	20	0.0500	u
Iodomethane	0.2078	0.1401	21.25	14.32	ug/L	**-33**	20	0.0500	c- u v- ***
Acetone	0.0906	0.0965	21.25	22.64	ug/L	7	20	0.0500	u
1,1-Dichloroethene	0.2178	0.2131	21.25	20.79	ug/L	-2	20	0.0500	u
Methylene Chloride	0.3199	0.2973	21.25	19.75	ug/L	-7	20	0.0500	u
Carbon Disulfide	0.8574	0.7932	21.25	19.66	ug/L	-7	20	0.0500	u
MTBE	0.7092	0.7150	21.25	21.42	ug/L	1	20	0.0500	u
trans-1,2-Dichloroethene	0.2601	0.2624	21.25	21.44	ug/L	1	20	0.0500	u
Vinyl Acetate	0.2929	0.6012	21.25	43.62	ug/L	**105**	20	0.0500	c+ rsd u ***
1,1-Dichloroethane	0.4429	0.4782	21.25	22.95	ug/L	8	20	0.1000	u
2-Butanone	0.1077	0.1431	21.25	28.25	ug/L	**33**	20	0.0500	c+ u ***
cis-1,2-Dichloroethene	0.2873	0.2855	21.25	21.11	ug/L	-1	20	0.0500	u
2,2-Dichloropropane	0.2755	0.3541	21.25	27.31	ug/L	**29**	20	0.0500	c+ u ***
Chloroform	0.4593	0.4531	21.25	20.96	ug/L	-1	20	0.0500	u
Bromochloromethane	0.1439	0.1517	21.25	22.39	ug/L	5	20	0.0500	u
1,1,1-Trichloroethane	0.3202	0.3301	21.25	21.91	ug/L	3	20	0.0500	u
1,1-Dichloropropene	0.2350	0.2473	21.25	22.36	ug/L	5	20	0.0500	u
Carbon Tetrachloride	0.1834	0.1901	21.25	22.03	ug/L	4	20	0.0500	u
1,2-Dichloroethane	0.2243	0.2646	21.25	25.07	ug/L	18	20	0.0500	u
Benzene	0.6732	0.6876	21.25	21.70	ug/L	2	20	0.0500	u
Trichloroethene	0.1871	0.1760	21.25	19.99	ug/L	-6	20	0.0500	u
1,2-Dichloropropane	0.1775	0.1950	21.25	23.35	ug/L	10	20	0.0500	u
Bromodichloromethane	0.2407	0.2534	21.25	22.37	ug/L	5	20	0.0500	u
Dibromomethane	0.1329	0.1374	21.25	21.97	ug/L	3	20	0.0500	u
4-Methyl-2-Pentanone	0.1545	0.2136	21.25	29.39	ug/L	**38**	20	0.0500	c+ u ***
cis-1,3-Dichloropropene	0.2700	0.3206	21.25	25.23	ug/L	19	20	0.0500	u
Toluene	0.5354	0.5340	21.25	21.19	ug/L	0	20	0.0500	u
trans-1,3-Dichloropropene	0.3161	0.3375	21.25	22.69	ug/L	7	20	0.0500	u
1,1,2-Trichloroethane	0.1168	0.1243	21.25	22.62	ug/L	6	20	0.0500	u
2-Hexanone	0.1342	0.1798	21.25	28.47	ug/L	**34**	20	0.0500	c+ u ***
1,3-Dichloropropane	0.3457	0.3746	21.25	23.02	ug/L	8	20	0.0500	u
Tetrachloroethene	0.2303	0.2205	21.25	20.35	ug/L	-4	20	0.0500	u
Dibromochloromethane	0.2347	0.2337	21.25	21.16	ug/L	0	20	0.0500	u
1,2-Dibromoethane	0.2197	0.2345	21.25	22.68	ug/L	7	20	0.0500	u
Chlorobenzene	0.5775	0.5749	21.25	21.15	ug/L	0	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.2098	0.2112	21.25	21.40	ug/L	1	20	0.0500	u
Ethylbenzene	0.9830	1.0008	21.25	21.64	ug/L	2	20	0.0500	u
m,p-Xylenes	0.3543	0.3679	42.50	44.13	ug/L	4	20	0.0500	u
o-Xylene	0.3588	0.3692	21.25	21.87	ug/L	3	20	0.0500	u
Styrene	0.6039	0.6469	21.25	22.76	ug/L	7	20	0.0500	u
Bromoform	0.1686	0.1495	21.25	18.85	ug/L	-11	20	0.1000	u
Isopropylbenzene	1.5380	1.3582	21.25	18.77	ug/L	-12	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.4709	0.5125	21.25	23.13	ug/L	9	20	0.3000	u
1,2,3-Trichloropropane	0.1240	0.1282	21.25	21.97	ug/L	3	20	0.0500	u
Propylbenzene	1.9011	1.8766	21.25	20.98	ug/L	-1	20	0.0500	u
Bromobenzene	0.4834	0.4777	21.25	21.00	ug/L	-1	20	0.0500	u
1,3,5-Trimethylbenzene	1.1415	1.2071	21.25	22.47	ug/L	6	20	0.0500	u
2-Chlorotoluene	1.2813	1.3091	21.25	21.71	ug/L	2	20	0.0500	u
4-Chlorotoluene	1.2212	1.2112	21.25	21.07	ug/L	-1	20	0.0500	u
tert-Butylbenzene	0.9690	1.0415	21.25	22.84	ug/L	7	20	0.0500	u
1,2,4-Trimethylbenzene	1.1014	1.1642	21.25	22.46	ug/L	6	20	0.0500	u
sec-Butylbenzene	1.3833	1.4814	21.25	22.76	ug/L	7	20	0.0500	u
para-Isopropyl Toluene	1.0126	1.1098	21.25	23.29	ug/L	10	20	0.0500	u
1,3-Dichlorobenzene	0.8009	0.7960	21.25	21.12	ug/L	-1	20	0.0500	u
1,4-Dichlorobenzene	0.8088	0.7969	21.25	20.94	ug/L	-1	20	0.0500	u
n-Butylbenzene	0.8862	0.9640	21.25	23.11	ug/L	9	20	0.0500	u
1,2-Dichlorobenzene	0.7684	0.7738	21.25	21.40	ug/L	1	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.0770	0.0852	21.25	23.52	ug/L	11	20	0.0500	u
1,2,4-Trichlorobenzene	0.2555	0.2835	21.25	23.58	ug/L	11	20	0.0500	u
Hexachlorobutadiene	0.0786	0.1035	21.25	27.98	ug/L	**32**	20	0.0500	c+ u ***
Naphthalene	0.6922	0.8870	21.25	27.23	ug/L	**28**	20	0.0500	c+ u ***
1,2,3-Trichlorobenzene	0.2391	0.2681	21.25	23.83	ug/L	12	20	0.0500	u
Dibromofluoromethane	0.5241	0.5354	50.00	51.08	ug/L	2	20	0.0500	u
1,2-Dichloroethane-d4	0.3282	0.3633	50.00	55.35	ug/L	11	20	0.0500	u
Toluene-d8	1.2524	1.2527	50.00	50.01	ug/L	0	20	0.0500	u
Bromofluorobenzene	0.8711	0.9103	50.00	52.25	ug/L	5	20	0.0500	u

ISTD (ICAL hh717)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	3906633	3650413	-6.56	10.15	10.15	0.00
1,4-Difluorobenzene	5415536	5181288	-4.33	11.27	11.26	-0.01
Chlorobenzene-d5	4238599	4175481	-1.49	15.29	15.29	0.00
1,4-Dichlorobenzene-d4	2330596	2420505	3.86	18.00	17.99	-0.01

TEW 09/24/09 : Fixed QC# in LIMS & added S12845. [general version]

TEW 09/24/09 [Freon 12]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Chloromethane]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Vinyl Chloride]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Bromomethane]: Corrected fronting or tailing peak integration . [general version]

TEW 09/24/09 [Chloroethane]: Corrected fronting or tailing peak integration . [general version]

5% spike rule

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/28/09

+=high bias -=low bias c=CCV m=manual integration rsd=ICAL %RSD failure u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC512854 IDF : 1.0
Seqnum : 839380641005.2 File : kil05 Time : 21-SEP-2009 09:30
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5499	25.00	25.68	ug/L	3	20	0.0500	u
Chloromethane	0.5160	0.4265	25.00	20.66	ug/L	-17	20	0.1000	u
Vinyl Chloride	0.5175	0.4589	25.00	22.17	ug/L	-11	20	0.0500	u
Bromomethane	0.2608	0.3103	25.00	29.74	ug/L	19	20	0.0500	u
Chloroethane	0.4094	0.4332	25.00	26.45	ug/L	6	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6910	25.00	23.30	ug/L	-7	20	0.0500	u
Iodomethane	0.2599	0.3377	25.00	31.55	ug/L	**26**	20	0.0500	c+ u ***
Acetone	0.1382	0.1236	25.00	22.36	ug/L	-11	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3844	25.00	25.64	ug/L	3	20	0.0500	u
Methylene Chloride	0.5280	0.5269	25.00	24.95	ug/L	0	20	0.0500	u
Carbon Disulfide	1.4090	1.3143	25.00	23.32	ug/L	-7	20	0.0500	u
MTBE	1.5447	1.4601	25.00	23.63	ug/L	-5	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5035	25.00	27.58	ug/L	10	20	0.0500	u
Vinyl Acetate	0.9726	0.8735	25.00	22.45	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9802	25.00	26.06	ug/L	4	20	0.1000	u
2-Butanone	0.2331	0.2122	25.00	22.75	ug/L	-9	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5613	25.00	25.79	ug/L	3	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7517	25.00	26.34	ug/L	5	20	0.0500	u
Chloroform	0.9238	0.8935	25.00	24.18	ug/L	-3	20	0.0500	u
Bromochloromethane	0.2354	0.2456	25.00	26.08	ug/L	4	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7181	25.00	25.53	ug/L	2	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4323	25.00	25.63	ug/L	3	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3370	25.00	24.19	ug/L	-3	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3985	25.00	22.68	ug/L	-9	20	0.0500	u
Benzene	1.3404	1.3952	25.00	26.02	ug/L	4	20	0.0500	u
Trichloroethene	0.3158	0.3231	25.00	25.58	ug/L	2	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3621	25.00	25.18	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3863	0.3893	25.00	25.19	ug/L	1	20	0.0500	u
Dibromomethane	0.1802	0.1756	25.00	24.36	ug/L	-3	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2573	25.00	21.13	ug/L	-15	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5618	25.00	27.18	ug/L	9	20	0.0500	u
Toluene	0.9593	0.9864	25.00	25.71	ug/L	3	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5439	25.00	23.73	ug/L	-5	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1815	25.00	25.94	ug/L	4	20	0.0500	u
2-Hexanone	0.2445	0.2046	25.00	20.92	ug/L	-16	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6341	25.00	25.85	ug/L	3	20	0.0500	u
Tetrachloroethene	0.3329	0.3310	25.00	24.86	ug/L	-1	20	0.0500	u
Dibromochloromethane	0.3027	0.3095	25.00	25.56	ug/L	2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3097	25.00	25.39	ug/L	2	20	0.0500	u
Chlorobenzene	1.0519	1.0714	25.00	25.46	ug/L	2	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3375	25.00	25.13	ug/L	1	20	0.0500	u
Ethylbenzene	1.8115	1.9105	25.00	26.37	ug/L	5	20	0.0500	u
m,p-Xylenes	0.6304	0.6930	50.00	54.96	ug/L	10	20	0.0500	u
o-Xylene	0.6283	0.6660	25.00	26.50	ug/L	6	20	0.0500	u
Styrene	1.0367	1.1342	25.00	27.35	ug/L	9	20	0.0500	u
Bromoform	0.1849	0.2011	25.00	23.51	ug/L	-6	20	0.1000	u
Isopropylbenzene	3.8595	3.7005	25.00	23.97	ug/L	-4	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9581	25.00	24.98	ug/L	0	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0502	25.00	25.65	ug/L	3	20	0.0500	u
Propylbenzene	3.9448	4.2843	25.00	27.15	ug/L	9	20	0.0500	u
Bromobenzene	1.0220	1.0260	25.00	25.10	ug/L	0	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.8981	25.00	26.42	ug/L	6	20	0.0500	u
2-Chlorotoluene	3.1099	3.3854	25.00	27.21	ug/L	9	20	0.0500	u
4-Chlorotoluene	2.6572	2.8510	25.00	26.82	ug/L	7	20	0.0500	u
tert-Butylbenzene	2.1712	2.2105	25.00	25.45	ug/L	2	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7198	25.00	25.77	ug/L	3	20	0.0500	u
sec-Butylbenzene	3.1284	3.1326	25.00	25.03	ug/L	0	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.3323	25.00	23.38	ug/L	-6	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.7428	25.00	25.78	ug/L	3	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6798	25.00	25.39	ug/L	2	20	0.0500	u
n-Butylbenzene	2.4331	2.3697	25.00	29.17	ug/L	17	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.6720	25.00	25.93	ug/L	4	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1724	25.00	24.50	ug/L	-2	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	0.9814	25.00	22.56	ug/L	-10	20	0.0500	u
Hexachlorobutadiene	0.4373	0.4039	25.00	23.09	ug/L	-8	20	0.0500	u
Naphthalene	2.7279	2.6992	25.00	24.74	ug/L	-1	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9498	25.00	23.56	ug/L	-6	20	0.0500	u
Dibromofluoromethane	0.4472	0.4506	50.00	50.38	ug/L	1	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3415	50.00	45.69	ug/L	-9	20	0.0500	u
Toluene-d8	1.4811	1.5369	50.00	51.88	ug/L	4	20	0.0500	u
Bromofluorobenzene	1.2424	1.2286	50.00	49.44	ug/L	-1	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1699378	12.89	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	2904596	18.70	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2516627	17.81	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1021365	3.85	17.10	17.10	0.00

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/28/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214846 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513025 IDF : 1.0
Seqnum : 839382075010.3 File : kim10 Time : 22-SEP-2009 11:24
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5374	25.00	25.09	ug/L	0	20	0.0500	u
Chloromethane	0.5160	0.4967	25.00	24.06	ug/L	-4	20	0.1000	u
Vinyl Chloride	0.5175	0.5211	25.00	25.18	ug/L	1	20	0.0500	u
Bromomethane	0.2608	0.3181	25.00	30.49	ug/L	**22**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4165	25.00	25.43	ug/L	2	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6672	25.00	22.49	ug/L	-10	20	0.0500	u
Iodomethane	0.2599	0.3068	25.00	28.96	ug/L	16	20	0.0500	u
Acetone	0.1382	0.1175	25.00	21.26	ug/L	-15	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3656	25.00	24.39	ug/L	-2	20	0.0500	u
Methylene Chloride	0.5280	0.5322	25.00	25.20	ug/L	1	20	0.0500	u
Carbon Disulfide	1.4090	1.3035	25.00	23.13	ug/L	-7	20	0.0500	u
MTBE	1.5447	1.4539	25.00	23.53	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.4808	25.00	26.34	ug/L	5	20	0.0500	u
Vinyl Acetate	0.9726	0.8755	25.00	22.50	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9426	25.00	25.06	ug/L	0	20	0.1000	u
2-Butanone	0.2331	0.2087	25.00	22.39	ug/L	-10	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5420	25.00	24.90	ug/L	0	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7002	25.00	24.54	ug/L	-2	20	0.0500	u
Chloroform	0.9238	0.8427	25.00	22.81	ug/L	-9	20	0.0500	u
Bromochloromethane	0.2354	0.2428	25.00	25.78	ug/L	3	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.6628	25.00	23.56	ug/L	-6	20	0.0500	u
1,1-Dichloropropene	0.4217	0.3928	25.00	23.29	ug/L	-7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.2997	25.00	21.51	ug/L	-14	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3866	25.00	22.00	ug/L	-12	20	0.0500	u
Benzene	1.3404	1.3296	25.00	24.80	ug/L	-1	20	0.0500	u
Trichloroethene	0.3158	0.2955	25.00	23.39	ug/L	-6	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3419	25.00	23.78	ug/L	-5	20	0.0500	u
Bromodichloromethane	0.3863	0.3622	25.00	23.44	ug/L	-6	20	0.0500	u
Dibromomethane	0.1802	0.1690	25.00	23.45	ug/L	-6	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2456	25.00	20.17	ug/L	-19	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5285	25.00	25.57	ug/L	2	20	0.0500	u
Toluene	0.9593	0.9242	25.00	24.09	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5168	25.00	22.55	ug/L	-10	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1725	25.00	24.65	ug/L	-1	20	0.0500	u
2-Hexanone	0.2445	0.1911	25.00	19.54	ug/L	**-22**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.6023	25.00	24.55	ug/L	-2	20	0.0500	u
Tetrachloroethene	0.3329	0.2934	25.00	22.04	ug/L	-12	20	0.0500	u
Dibromochloromethane	0.3027	0.2868	25.00	23.68	ug/L	-5	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2934	25.00	24.06	ug/L	-4	20	0.0500	u
Chlorobenzene	1.0519	0.9935	25.00	23.61	ug/L	-6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3071	25.00	22.87	ug/L	-9	20	0.0500	u
Ethylbenzene	1.8115	1.7256	25.00	23.81	ug/L	-5	20	0.0500	u
m,p-Xylenes	0.6304	0.6182	50.00	49.03	ug/L	-2	20	0.0500	u
o-Xylene	0.6283	0.5958	25.00	23.71	ug/L	-5	20	0.0500	u
Styrene	1.0367	1.0254	25.00	24.73	ug/L	-1	20	0.0500	u
Bromoform	0.1849	0.1874	25.00	22.01	ug/L	-12	20	0.1000	u
Isopropylbenzene	3.8595	3.3494	25.00	21.70	ug/L	-13	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9652	25.00	25.17	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0393	25.00	25.39	ug/L	2	20	0.0500	u
Propylbenzene	3.9448	3.7203	25.00	23.58	ug/L	-6	20	0.0500	u
Bromobenzene	1.0220	1.0012	25.00	24.49	ug/L	-2	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.7898	25.00	25.43	ug/L	2	20	0.0500	u
2-Chlorotoluene	3.1099	3.1506	25.00	25.33	ug/L	1	20	0.0500	u
4-Chlorotoluene	2.6572	2.6050	25.00	24.51	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.8614	25.00	21.43	ug/L	-14	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7503	25.00	26.06	ug/L	4	20	0.0500	u
sec-Butylbenzene	3.1284	2.6477	25.00	21.16	ug/L	-15	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.1983	25.00	22.04	ug/L	-12	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6155	25.00	23.90	ug/L	-4	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5576	25.00	23.54	ug/L	-6	20	0.0500	u
n-Butylbenzene	2.4331	2.3610	25.00	29.02	ug/L	16	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.5576	25.00	24.16	ug/L	-3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1679	25.00	23.86	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.0197	25.00	23.44	ug/L	-6	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3513	25.00	20.08	ug/L	-20	20	0.0500	u
Naphthalene	2.7279	2.8247	25.00	25.89	ug/L	4	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9918	25.00	24.60	ug/L	-2	20	0.0500	u
Dibromofluoromethane	0.4472	0.4622	50.00	51.68	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3432	50.00	45.92	ug/L	-8	20	0.0500	u
Toluene-d8	1.4811	1.5568	50.00	52.55	ug/L	5	20	0.0500	u
Bromofluorobenzene	1.2424	1.2647	50.00	50.90	ug/L	2	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1771090	17.66	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3063159	25.18	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2626334	22.95	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1004184	2.11	17.10	17.10	0.00

BO 09/22/09 : Standard ID fixed in LIMS [general version]

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/28/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 479385171

Date : 09/24/09 Reference : hh717
Sequence : MSVOA08 hio Analyzed : 08/07/09 17:09

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	3906633	10.15	5415536	11.27	4238599	15.29	2330596	18.00
		LOWER LIMIT	1953317	9.65	2707768	10.77	2119300	14.79	1165298	17.50
		UPPER LIMIT	7813266	10.65	10831072	11.77	8477198	15.79	4661192	18.50
003	CCV	TVH1600PPB	3660518	10.15	5293925	11.26	4225446	15.29	2411003	17.99
005	CCV		3609929	10.15	5079413	11.27	4075229	15.29	2352264	17.99
006	BS	QC513471	3634950	10.15	5138244	11.26	4069528	15.29	2298974	17.99
007	BSD	QC513472	3259814	10.15	4679353	11.27	3800253	15.28	2143273	17.99
009	BLANK	QC513468	3380865	10.15	4857235	11.26	3914952	15.28	2180862	17.99
010	SAMPLE	214846-004	3538538	10.15	5052648	11.26	3954820	15.29	2181724	17.99
011	SAMPLE	215022-002	3341846	10.15	4810581	11.26	3842190	15.28	2181761	17.99
014	CCV/LCS	QC513532	3650413	10.15	5181288	11.26	4175481	15.29	2420505	17.99
015	CCV	TVH1600PPB	3445618	10.15	4890154	11.26	3944197	15.29	2194202	17.99
017	BLANK	QC513594	3562070	10.16	5138232	11.26	4064128	15.28	2257594	17.99
018	SAMPLE	215015-009	3515065	10.16	5083181	11.27	4118804	15.28	2241245	17.99
019	SAMPLE	215015-008	3520683	10.15	5046227	11.27	4096703	15.29	2268238	17.99
020	SAMPLE	215038-006	3283844	10.15	4824702	11.27	3900316	15.29	2182834	17.99
021	SAMPLE	215038-007	3496053	10.15	4977493	11.27	4023062	15.29	2238700	17.99
022	SAMPLE	215015-001	3263441	10.15	4599127	11.27	3727359	15.28	2030938	17.99
023	MSS	215015-002	3483713	10.15	4905818	11.27	3952237	15.29	2205470	17.99
024	SAMPLE	215015-004	3472051	10.15	4982221	11.27	4001501	15.28	2221403	17.99
025	SAMPLE	215015-011	3454881	10.15	4880321	11.26	3967461	15.29	2188174	18.00
026	SAMPLE	215015-006	3424549	10.15	4920981	11.27	4046823	15.29	2259113	17.99
027	SAMPLE	215015-010	3492106	10.15	4894032	11.26	3939587	15.29	2203272	17.99
028	SAMPLE	215015-005	3499975	10.15	4901183	11.27	3886954	15.29	2160687	17.99
029	SAMPLE	215015-003	3401164	10.15	4862726	11.26	3918664	15.29	2175745	18.00
030	SAMPLE	215015-007	3224506	10.15	4541612	11.27	3709598	15.28	2043204	17.99
031	SAMPLE	215015-012	3280595	10.15	4589521	11.26	3708056	15.28	2057604	18.00
032	MS	QC513533	3513517	10.15	4963548	11.26	3993167	15.29	2298361	17.99
033	MSD	QC513534	3534933	10.15	5003647	11.26	3953529	15.28	2300089	17.99

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839380641

Date : 09/21/09 Reference : kif12
Sequence : MSVOA11 kil Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
005	CCV/BS	QC512854	1699378	10.81	2904596	11.74	2516627	14.82	1021365	17.10
006	BSD	QC512855	1851769	10.81	3179021	11.74	2756220	14.82	1107271	17.10
008	BLANK	QC512856	1734993	10.81	3024239	11.74	2537530	14.82	716553	17.10
009	SAMPLE	214846-012	1693624	10.81	2940310	11.74	2484300	14.82	750510	17.10
010	SAMPLE	214846-003	1614668	10.81	2801777	11.74	2376106	14.82	719961	17.10
011	SAMPLE	214846-004	1582036	10.82	2764461	11.74	2347763	14.82	714709	17.10
012	SAMPLE	214846-005	1566988	10.81	2735175	11.74	2341097	14.82	696324	17.10
013	SAMPLE	214846-006	1551771	10.81	2719756	11.74	2311026	14.82	626743	17.10
014	SAMPLE	214846-007	1541501	10.81	2696916	11.74	2275943	14.82	678236	17.10
015	SAMPLE	214846-008	1512642	10.81	2654800	11.74	2292456	14.82	913392	17.10
016	SAMPLE	214846-009	2062833	10.81	3529073	11.74	3052702	14.82	1009551	17.10
017	SAMPLE	214846-010	2400145	10.81	4061618	11.74	3367586	14.82	1496353	17.10
018	SAMPLE	214846-011	2572353	10.81	4259810	11.74	3512080	14.82	1167404	17.10
019	SAMPLE	214846-013	2651454	10.81	4413282	11.74	3627126	14.82	1124362	17.10
020	SAMPLE	214846-014	2543494	10.81	4265585	11.74	3482026	14.82	1006625	17.10
021	SAMPLE	214846-015	2358746	10.81	3970815	11.74	3251617	14.82	922274	17.10
022	SAMPLE	214846-016	2157390	10.81	3664503	11.74	3007820	14.82	851439	17.10
023	SAMPLE	214846-017	2039639	10.81	3503747	11.74	2889577	14.82	857588	17.10
024	SAMPLE	214846-018	1957431	10.81	3350956	11.74	2775323	14.82	790062	17.10
025	SAMPLE	214846-019	1843605	10.81	3182366	11.74	2647469	14.82	774631	17.10
026	SAMPLE	214846-020	1786988	10.81	3094714	11.74	2564949	14.82	768779	17.10
027	SAMPLE	214846-021	1740997	10.81	3035685	11.74	2515969	14.82	726373	17.10
028	SAMPLE	214803-004	1697850	10.81	2981513	11.74	2471057	14.82	689989	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839382075

Date : 09/22/09 Reference : kif12
Sequence : MSVOA11 kim Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
010	CCV/LCS	QC513025	1771090	10.81	3063159	11.74	2626334	14.82	1004184	17.10
012	BLANK	QC513026	1677689	10.81	2938196	11.74	2420292	14.82	683430	17.10
013	MSS	214805-007	1627599	10.81	2892984	11.74	2404486	14.82	690720	17.10
014	SAMPLE	214805-009	1565529	10.81	2757761	11.74	2302025	14.82	604953	17.10
015	SAMPLE	214804-009	1505672	10.81	2669448	11.74	2197601	14.82	618082	17.10
016	SAMPLE	214804-011	1472585	10.81	2635877	11.74	2197171	14.82	646353	17.10
017	MS	QC513027	1510323	10.81	2678148	11.74	2313548	14.82	929714	17.10
018	MSD	QC513028	1575123	10.81	2772606	11.74	2395237	14.82	921218	17.10
020	SAMPLE	214846-004	1562873	10.81	2775408	11.74	2321901	14.82	639407	17.10
021	SAMPLE	214846-011	1507399	10.81	2695223	11.74	2258483	14.82	634750	17.10
022	SAMPLE	214846-001	1500905	10.81	2683520	11.74	2225923	14.82	602925	17.10
023	SAMPLE	214846-002	1479800	10.81	2643433	11.74	2219182	14.82	643099	17.10
024	SAMPLE	214850-001	1460536	10.81	2646196	11.74	2223363	14.82	624455	17.10
025	SAMPLE	214850-002	1443304	10.81	2599314	11.74	2166147	14.82	617441	17.10
026	SAMPLE	214850-003	1431257	10.81	2579824	11.74	2159311	14.82	628643	17.10
027	SAMPLE	214850-004	1390945	10.82	2516509	11.74	2125898	14.82	623666	17.10
028	SAMPLE	214850-005	1370408	10.81	2496229	11.74	2075026	14.82	571800	17.10
029	SAMPLE	214850-007	1364380	10.81	2450761	11.74	2057537	14.82	614715	17.10
030	SAMPLE	214850-008	1349570	10.81	2433732	11.74	2056869	14.82	584289	17.10
031	SAMPLE	214850-009	1286875	10.81	2337019	11.74	1964124	14.82	556855	17.10
032	SAMPLE	214850-010	1308540	10.81	2376141	11.74	2004063	14.82	588911	17.10
033	SAMPLE	214850-011	1292398	10.82	2344962	11.74	1986998	14.82	557910	17.10
034	SAMPLE	214850-012	1301082	10.81	2360769	11.74	2003780	14.82	583821	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 479315844

Instrument : MSVOA08 Begun : 08/07/09 08:04
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hh701	X	IB			08/07/09 08:04	1.0	1	
002	hh702	TUN	BFB			08/07/09 08:44	1.0	2	
003	hh703	X	IB			08/07/09 09:14	1.0	1	
004	hh704	X	CALIB IB			08/07/09 09:51	1.0	1	
005	hh705	TUN	BFB			08/07/09 10:21	1.0	2	
006	hh706	TUN	BFB			08/07/09 10:52	1.0	2	
007	hh707	TUN	BFB			08/07/09 11:20	1.0	2	
008	hh708	TUN	BFB			08/07/09 11:41	1.0	2	
009	hh709	X	IB			08/07/09 12:21	1.0	1	
010	hh710	IB	CALIB IB			08/07/09 12:57	1.0	1	
011	hh711	ICAL	0.25/0.5PPB			08/07/09 13:33	1.0	3 4 5 6 1	
012	hh712	ICAL	0.5/1PPB			08/07/09 14:09	1.0	3 4 5 6 1	
013	hh713	ICAL	2PPB			08/07/09 14:45	1.0	3 4 5 6 1	
014	hh714	ICAL	5PPB			08/07/09 15:21	1.0	3 4 5 6 1	
015	hh715	ICAL	10PPB			08/07/09 15:57	1.0	3 4 5 6 1	
016	hh716	ICAL	20PPB			08/07/09 16:33	1.0	7 8 9 10 1	
017	hh717	ICAL	50PPB			08/07/09 17:09	1.0	7 8 9 10 1	
018	hh718	ICAL	75PPB			08/07/09 17:45	1.0	7 8 9 10 1	
019	hh719	ICAL	100PPB			08/07/09 18:21	1.0	7 8 9 10 1	
020	hh720	ICV	25PPB			08/07/09 18:57	1.0	11 1	
021	hh721	ICV	25PPB			08/07/09 19:33	1.0	12 13 14 1	
022	hh722	X	IB			08/07/09 20:09	1.0	1	
023	hh723	X	IB			08/07/09 20:46	1.0	1	
024	hh724	X	IB			08/07/09 21:22	1.0	1	

BO 08/07/09 : Tune drifted, adjusted tune for hh706, hh707

BO 08/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 24.

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

Standards used: 1=S12562 2=S12404 3=S12664 4=S12665 5=S12666 6=S12667 7=S12508 8=S12517 9=S12217 10=S12487 11=S12669 12=S12589 13=S12587 14=S12258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 479320168

Instrument : MSVOA08 Begun : 08/10/09 08:08
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hha01	X	IB			08/10/09 08:08	1.0	1	
002	hha02	X	BFB			08/10/09 08:43	1.0	2	
003	hha03	TUN	BFB			08/10/09 09:02	1.0	2	
004	hha04	CCV	20PPB			08/10/09 09:30	1.0	3 4 5 6 1	
005	hha05	X	QC506824	Water	153689	08/10/09 10:53	1.0	7 8 9 10 1	
006	hha06	X	QC506825	Water	153689	08/10/09 11:30	1.0	7 8 9 10 1	
007	hha07	ICV	25PPB			08/10/09 12:06	1.0	11 1	
008	hha08	BS	QC506824	Water	153689	08/10/09 12:42	1.0	7 8 9 10 1	
009	hha09	BSD	QC506825	Water	153689	08/10/09 13:18	1.0	7 8 9 10 1	
010	hha10	TUN	BFB			08/10/09 13:47	1.0	2	
011	hha11	CCV	20PPB			08/10/09 14:04	1.0	1 3 4 5 6	
012	hha12	X	IB			08/10/09 14:40	1.0	1	
013	hha13	BLANK	QC506826	Water	153689	08/10/09 15:16	1.0	1	
014	hha14	X	214047-007		153689	08/10/09 15:52	1.0	1	
015	hha15	SAMPLE	214044-011	Water	153689	08/10/09 16:29	1.0	1	
016	hha16	SAMPLE	214041-018	Water	153689	08/10/09 17:05	1.0	1	
017	hha17	SAMPLE	214062-005	Water	153689	08/10/09 17:41	1.0	1	
018	hha18	SAMPLE	214060-001	Water	153689	08/10/09 18:17	1.0	1	
019	hha19	SAMPLE	214063-011	Water	153689	08/10/09 18:54	1.0	1	
020	hha20	SAMPLE	214043-004	Water	153689	08/10/09 19:30	1.0	1	
021	hha21	SAMPLE	214031-002	Water	153689	08/10/09 20:06	1.0	1	
022	hha22	SAMPLE	214031-003	Water	153689	08/10/09 20:42	1.0	1	
023	hha23	SAMPLE	214047-002	Water	153689	08/10/09 21:18	1.0	1	
024	hha24	SAMPLE	214047-003	Water	153689	08/10/09 21:54	1.0	1	
025	hha25	SAMPLE	214030-013	Water	153689	08/10/09 22:30	1.0	1	
026	hha26	SAMPLE	214030-014	Water	153689	08/10/09 23:06	1.0	1	
027	hha27	SAMPLE	214031-001	Water	153689	08/10/09 23:43	5.0	1	
028	hha28	SAMPLE	214047-004	Water	153689	08/11/09 00:19	200.0	1	
029	hha29	SAMPLE	214047-006	Water	153689	08/11/09 00:55	10.0	1	
030	hha30	SAMPLE	214047-005	Water	153689	08/11/09 01:31	1429	1	
031	hha31	X	IB			08/11/09 02:07	1.0	1	
032	hha32	X	IB			08/11/09 02:43	1.0	1	
033	hha33	X	IB			08/11/09 03:19	1.0	1	

BO 08/11/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

BO 08/11/09 : Matrix spikes were not performed for this analysis in batch 153689 due to insufficient sample amount.

Analyst: BO Date: 08/11/09 Reviewer: LW Date: 08/11/09

Standards used: 1=S12562 2=S12404 3=S12508 4=S12517 5=S12217 6=S12487 7=S12589 8=S12587 9=S12693 10=S12669 11=S12672

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 479385171

Instrument : MSVOA08 Begun : 09/24/09 11:31
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hio01	X	IB			09/24/09 11:31	1.0	1	
002	hio02	TUN	BFB			09/24/09 12:01	1.0	2	
003	hio03	CCV	TVH1600PPB			09/24/09 12:29	1.0	3 1	1:BZME=120
004	hio04	X				09/24/09 13:05	1.0	4 5 6 1	
005	hio05	CCV				09/24/09 13:41	1.0	4 5 6 1 7	
006	hio06	BS	QC513471	Water	155261	09/24/09 14:17	1.0	8 1	
007	hio07	BSD	QC513472	Water	155261	09/24/09 14:53	1.0	8 1	
008	hio08	X	IB			09/24/09 15:29	1.0	1	
009	hio09	BLANK	QC513468	Water	155261	09/24/09 16:05	1.0	1	
010	hio10	SAMPLE	214846-004	Water	155261	09/24/09 16:41	1.0	1	headspace > 1 mL
011	hio11	SAMPLE	215022-002	Water	155261	09/24/09 17:17	2.500	1	
012	hio12	X	BFB			09/24/09 17:46	1.0	2	
013	hio13	TUN	BFB			09/24/09 18:01	1.0	2	
014	hio14	CCV/LCS	QC513532	Water	155261	09/24/09 18:34	1.0	4 5 9 1 7	
015	hio15	CCV	TVH1600PPB			09/24/09 19:10	1.0	1 3	1:BZME=130
016	hio16	X	IB			09/24/09 19:46	1.0	1	
017	hio17	BLANK	QC513594	Water	155261	09/24/09 20:22	1.0	1	
018	hio18	SAMPLE	215015-009	Water	155261	09/24/09 20:59	1.0	1	
019	hio19	SAMPLE	215015-008	Water	155261	09/24/09 21:35	1.0	1	pH > 2
020	hio20	SAMPLE	215038-006	Water	155261	09/24/09 22:12	1.0	1	
021	hio21	SAMPLE	215038-007	Water	155261	09/24/09 22:48	1.0	1	
022	hio22	SAMPLE	215015-001	Water	155261	09/24/09 23:24	1.0	1	
023	hio23	MSS	215015-002	Water	155261	09/25/09 00:01	1.0	1	pH > 2
024	hio24	SAMPLE	215015-004	Water	155261	09/25/09 00:37	1.0	1	
025	hio25	SAMPLE	215015-011	Water	155261	09/25/09 01:14	1.0	1	
026	hio26	SAMPLE	215015-006	Water	155261	09/25/09 01:50	1.0	1	
027	hio27	SAMPLE	215015-010	Water	155261	09/25/09 02:27	1.0	1	
028	hio28	SAMPLE	215015-005	Water	155261	09/25/09 03:03	1.0	1	
029	hio29	SAMPLE	215015-003	Water	155261	09/25/09 03:39	4.0	1	
030	hio30	SAMPLE	215015-007	Water	155261	09/25/09 04:16	4.0	1	
031	hio31	SAMPLE	215015-012	Water	155261	09/25/09 04:52	5.0	1	
032	hio32	MS	QC513533	Water	155261	09/25/09 05:29	1.0	4 5 9 1	
033	hio33	MSD	QC513534	Water	155261	09/25/09 06:05	1.0	4 5 9 1	
034	hio34	X	IB			09/25/09 06:41	1.0	1	
035	hio35	X	IB			09/25/09 07:18	1.0	1	
036	hio36	X	IB			09/25/09 07:54	1.0	1	

MJD 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

Analyst: MJD Date: 09/25/09 Reviewer: LW Date: 09/25/09

Standards used: 1=S12921 2=S12404 3=S12207 4=S12996 5=S12693 6=S12923 7=S12845 8=S12208 9=S12925

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839380641

Instrument : MSVOA11 Begun : 09/21/09 08:01
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kil01	X	IB			09/21/09 08:01	1.0	1
002	kil02	X	BFB			09/21/09 08:28	1.0	2
003	kil03	TUN	BFB			09/21/09 08:39	1.0	2
004	kil04	X	20PPB			09/21/09 08:52	1.0	3 4 5 6 1
005	kil05	CCV/BS	QC512854	Water	155111	09/21/09 09:30	1.0	7 8 9 10 1
006	kil06	BSD	QC512855	Water	155111	09/21/09 09:58	1.0	7 8 9 10 1
007	kil07	X	IB			09/21/09 10:27	1.0	1
008	kil08	BLANK	QC512856	Water	155111	09/21/09 10:55	1.0	1
009	kil09	SAMPLE	214846-012	Water	155111	09/21/09 11:23	1.0	1
010	kil10	SAMPLE	214846-003	Water	155111	09/21/09 11:52	1.0	1
011	kil11	SAMPLE	214846-004	Water	155111	09/21/09 12:20	1.0	1
012	kil12	SAMPLE	214846-005	Water	155111	09/21/09 12:48	1.0	1
013	kil13	SAMPLE	214846-006	Water	155111	09/21/09 13:17	1.0	1
014	kil14	SAMPLE	214846-007	Water	155111	09/21/09 13:45	1.0	1
015	kil15	SAMPLE	214846-008	Water	155111	09/21/09 14:13	1.0	1
016	kil16	SAMPLE	214846-009	Water	155111	09/21/09 14:41	1.0	1
017	kil17	SAMPLE	214846-010	Water	155111	09/21/09 15:10	1.0	1
018	kil18	SAMPLE	214846-011	Water	155111	09/21/09 15:38	1.0	1
019	kil19	SAMPLE	214846-013	Water	155111	09/21/09 16:06	1.0	1
020	kil20	SAMPLE	214846-014	Water	155111	09/21/09 16:35	1.0	1
021	kil21	SAMPLE	214846-015	Water	155111	09/21/09 17:03	1.0	1
022	kil22	SAMPLE	214846-016	Water	155111	09/21/09 17:31	1.0	1
023	kil23	SAMPLE	214846-017	Water	155111	09/21/09 17:59	1.0	1
024	kil24	SAMPLE	214846-018	Water	155111	09/21/09 18:28	1.0	1
025	kil25	SAMPLE	214846-019	Water	155111	09/21/09 18:56	1.0	1
026	kil26	SAMPLE	214846-020	Water	155111	09/21/09 19:24	1.0	1
027	kil27	SAMPLE	214846-021	Water	155111	09/21/09 19:52	1.0	1
028	kil28	SAMPLE	214803-004	Water	155111	09/21/09 20:21	1.0	1
029	kil29	X	IB			09/21/09 20:49	1.0	1
030	kil30	X	IB			09/21/09 21:17	1.0	1
031	kil31	X	IB			09/21/09 21:45	1.0	1
032	kil32	X	IB			09/21/09 22:14	1.0	1
033	kil33	X	IB			09/21/09 22:42	1.0	1
034	kil34	X	IB			09/21/09 23:10	1.0	1

BO 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 34.

BO 09/22/09 : Matrix spikes were not performed for this analysis in batch 155111 due to insufficient sample amount.

Analyst: BO Date: 09/22/09 Reviewer: LW Date: 09/22/09

Standards used: 1=S12947 2=S12404 3=S12733 4=S12773 5=S12217 6=S12634 7=S12589 8=S12845 9=S12693 10=S12923

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839382075

Instrument : MSVOA11 Begun : 09/22/09 07:55
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kim01	X	IB			09/22/09 07:55	1.0	1	
002	kim02	X	BFB			09/22/09 08:22	1.0	2	
003	kim03	X	QC513025	Water	155153	09/22/09 08:36	1.0	3 4 5 6 1	
004	kim04	X	BFB			09/22/09 09:14	1.0	2	
005	kim05	X	BFB			09/22/09 09:25	1.0	2	
006	kim06	X	25PPB			09/22/09 09:38	1.0	7 8 9 10 1	
007	kim07	X	QC513025	Water	155153	09/22/09 10:15	1.0	3 4 5 6 1	
008	kim08	X	IB			09/22/09 10:43	1.0	1	
009	kim09	TUN	BFB			09/22/09 11:11	1.0	2	
010	kim10	CCV/LCS	QC513025	Water	155153	09/22/09 11:24	1.0	11 4 5 6 1	
011	kim11	X	IB			09/22/09 11:53	1.0	1	
012	kim12	BLANK	QC513026	Water	155153	09/22/09 12:21	1.0	1	
013	kim13	MSS	214805-007	Water	155153	09/22/09 12:49	1.0	1	
014	kim14	SAMPLE	214805-009	Water	155153	09/22/09 13:18	1.0	1	
015	kim15	SAMPLE	214804-009	Water	155153	09/22/09 13:46	1.0	1	
016	kim16	SAMPLE	214804-011	Water	155153	09/22/09 14:14	1.0	1	
017	kim17	MS	QC513027	Water	155153	09/22/09 14:43	1.0	1 11 4 5 6	
018	kim18	MSD	QC513028	Water	155153	09/22/09 15:11	1.0	1 11 4 5 6	
019	kim19	X	IB			09/22/09 15:39	1.0	1	
020	kim20	SAMPLE	214846-004	Water	155153	09/22/09 16:08	1.0	1	
021	kim21	SAMPLE	214846-011	Water	155153	09/22/09 16:36	1.0	1	
022	kim22	SAMPLE	214846-001	Water	155153	09/22/09 17:04	1.0	1	
023	kim23	SAMPLE	214846-002	Water	155153	09/22/09 17:32	1.0	1	
024	kim24	SAMPLE	214850-001	Water	155153	09/22/09 18:01	1.0	1	
025	kim25	SAMPLE	214850-002	Water	155153	09/22/09 18:29	1.0	1	
026	kim26	SAMPLE	214850-003	Water	155153	09/22/09 18:57	1.0	1	
027	kim27	SAMPLE	214850-004	Water	155153	09/22/09 19:26	1.0	1	
028	kim28	SAMPLE	214850-005	Water	155153	09/22/09 19:54	1.0	1	
029	kim29	SAMPLE	214850-007	Water	155153	09/22/09 20:22	1.0	1	
030	kim30	SAMPLE	214850-008	Water	155153	09/22/09 20:50	1.0	1	
031	kim31	SAMPLE	214850-009	Water	155153	09/22/09 21:19	1.0	1	
032	kim32	SAMPLE	214850-010	Water	155153	09/22/09 21:47	1.0	1	
033	kim33	SAMPLE	214850-011	Water	155153	09/22/09 22:15	1.0	1	
034	kim34	SAMPLE	214850-012	Water	155153	09/22/09 22:44	2.0	1	
035	kim35	X	IB			09/22/09 23:12	1.0	1	
036	kim36	X	IB			09/22/09 23:40	1.0	1	
037	kim37	X	IB			09/23/09 00:08	1.0	1	
038	kim38	X	IB			09/23/09 00:37	1.0	1	
039	kim39	X	IB			09/23/09 01:05	1.0	1	

BO 09/22/09 : KIM10, used new alliquot of standard

BO 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923 7=S12733 8=S12773 9=S12217 10=S12634 11=S12996

GC/MS VOLATILE ORGANICS

Batch #: 155111

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214803-4	C	<2	LV			11	MW 1x, 00 METHOD 75	
2	214846-3	A						1x	
3	-4								
4	-5								
5	-6								
6	-7								
7	-8								
8	-9								
9	-10								
10	-11	B							
11	-12	A		LV				TB	
12	-13							1x	
13	-14	B							
14	-15	A							
15	-16								
16	-17								
17	-18	B							
18	-19	A							
19	-20								
20	-21								
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155153

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214846-4	B	<2		1		11	mm 1x, 5mm ↑	
2	-11	C						mm 1x, 1+C co	
3	-1	A						TB	
4	-2							1x	
5	214850-1	A	<2		3				
6	-2								
7	-3								
8	-4								
9	-5								
10	-6							MSS PUT OFF	
11	-6							MS/MSD	
12	-7	A	<2						
13	-8								
14	-9								
15	-10								
16	-11								
17	-12					3		2x ~~PUT OFF~~	
18	-13							1x PUT OFF	
19	-14							1x	
20	-15							2x	
21	-16							1x PUT OFF	
22	214805-9	A	<2					mm 1x, 12DCA ↑, hold 9/22	
23	214804-9	A						mm 1x, 12DCA↑, hold 9/22	
24	214805-7	A						MSS 1x	
25	214805-7	BHI						MS/MSD 1x	
26	214804-11	A						mm 1x, 12DCA↑ hold 9/22	
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155261

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215038-6	E	<2	LV	6		8	RRO 1x clock	TEW 9-24-09
2	-7							1x	
3	215022-2	C	<2		6	6		2.5x OD	
4	214846-4			10mL	1			1x BFB ↑ need sec-Butbz, Isopropbz Hold 9/24	
5	215015-1	B			6			1x	
6	-2		6					1x MSS	
7	-3		<2			7		4x	
8	-4							1x	
9	-5							1x	
10	-6							1x	
11	-7		<2			8		4x	
12	-8	A	5	LV				RB	
13	-9		<2					TB	
14	-10	B						1x	
15	-11							1x	
16	-12		<2			9		5x	
17	MS/MSD	C,D,E		~~LV~~				1x	
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214850
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091009A	214850-001
ASE-43C-9C1	214850-002
ASE-43B-9C1	214850-003
PL-508-9C1	214850-004
ASE-50C-9C1	214850-005
BC-3-9C1	214850-006
ASE-81A-9C1	214850-007
BC-9-9C1	214850-008
PL-510-9C1	214850-009
TB-091109A	214850-010
ASE-79C-9C1	214850-011
ASE-33A-9C1	214850-012
PL-512-9C1	214850-013
ASE-29A-9C1	214850-014
PL-103C-9C1	214850-015
PL-514-9C1	214850-016
PL-103A-9C1	214850-017
BC-12-9C1	214850-018

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214850**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/14/09**
Samples Received:	**09/12/09**

This data package contains sample and QC results for eighteen water samples, requested for the above referenced project on 09/14/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for 2-hexanone in the CCV analyzed 09/22/09 11:24; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for bromomethane; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for hexachlorobutadiene, 2-hexanone, and 4-methyl-2-pentanone in the CCV analyzed 09/23/09 08:44; these analytes met minimum response criteria, and affected data was qualified with "b".

High recoveries were observed for n-butylbenzene in the MS/MSD of ASE-21C-9C1 (lab # 214805-007); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene and trans-1,2-dichloroethene in the MS/MSD of BC-3-9C1 (lab # 214850-006); the LCS was within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

High surrogate recoveries were observed for bromofluorobenzene in ASE-50C-9C1 (lab # 214850-005), PL-510-9C1 (lab # 214850-009), and the method blank for batch 155153; no target analytes were detected in these samples.

No other analytical problems were encountered.

Chain of Custody

214850

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. ~~Weise~~ Wiese - D. Foehr - J. Yentes
PO # 5101516
Analysis Turnaround Time (TAT): 14 Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Order

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1				TB-091009A	9.10.09	0600				1			*														
2				ASE-43C-9C1		0747				3			*														
3				ASE-43B-9C1		0825				3			*														
4				PL-508-9C1		0835				3			*														
5				ASE-50C-9C1		0900				3			*														
6				BC-3-9C1		1003				9			*												X		
7				ASE-81A-9C1		1038				3			*														
8				BC-9-9C1		1305				3			*														
9				PL-510-9C1		1405				3			*														
10																											
11																											
12										31																	

Relinquished by	Company	H+A	Received by	Company	FEDEX	Condition	Custody Seals Intact
	Date/Time	09/11/09 15:00		Date/Time	09/11/09 15:00	Cooler Temp.	
Relinquished by	Company		Received by	Company		Condition	Custody Seals Intact
	Date/Time			Date/Time		Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214850

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 40060.70532
COC#: 37380

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Lab Proj # (SDG):
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST
Lab ID: CTBERK
Site ID: SKYHARBOR
Lab Job #:
Authorized User: Honeywell

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. ~~Weise~~ Wiese - D. Foehr - J. Yentes
PO #: 5101516
Analysis Turnaround Time (TAT): 14 Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Order

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)	MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units															
10 1				TB-091109A	9.11.09	0600				1			X													
11 2				ASE-79C-9C1		0635				3			X													
12 3				ASE-33A-9C1		0719				3			X													
13 4				PL-512-9C1		0729				3			X													
14 5				ASE-29A-9C1		0930				3			X													
15 6				PL-103C-9C1		1004				3			X													
16 7				PL-514-9C1		1013				3			X													
17 8				PL-103A-9C1		1034				3			X													
18 9				BC-12-9C1		1055				3			X													
10																										
11																										
12										25																

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
M Wiese	H+A		FED EX		
	Date/Time 09/11/09 15:00		Date/Time 09/11/09 15:00	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214850/214851 Date Received 9/12/09 Number of coolers 2
Client CH2M Hill Project Sky Harbor

Date Opened 9/12/09 By (print) Ricky Grams (sign) [signature]
Date Logged in 5-14 By (print) J. Grayette (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) (YES) NO
   Shipping info Fed Ex 842193543071
2A. Were custody seals present? ... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 each Name Signature Date 9/11/09
2B. Were custody seals intact upon arrival? (YES) NO N/A
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.5 / 2.5

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? YES (NO)
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are samples in the appropriate containers for indicated tests? (YES) NO
11. Are sample labels present, in good condition and complete? (YES) NO
12. Do the sample labels agree with custody papers? (YES) NO
13. Was sufficient amount of sample sent for tests requested? (YES) NO
14. Are the samples appropriately preserved? (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
16. Was the client contacted concerning this sample delivery? YES (NO)
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 214850

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091009A	Batch#:	155153
Lab ID:	214850-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091009A	Batch#:	155153
Lab ID:	214850-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-43C-9C1	Batch#:	155153
Lab ID:	214850-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.8	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-43C-9C1	Batch#:	155153
Lab ID:	214850-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-43B-9C1	Batch#:	155153
Lab ID:	214850-003	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.2	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	5.8	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-43B-9C1	Batch#:	155153
Lab ID:	214850-003	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-508-9C1	Batch#:	155153
Lab ID:	214850-004	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.2	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	5.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-508-9C1	Batch#:	155153
Lab ID:	214850-004	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-50C-9C1	Batch#:	155153
Lab ID:	214850-005	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-50C-9C1	Batch#:	155153
Lab ID:	214850-005	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	122 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	M1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.9	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.2	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	M1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-81A-9C1	Batch#:	155153
Lab ID:	214850-007	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	0.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-81A-9C1	Batch#:	155153
Lab ID:	214850-007	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-9-9C1	Batch#:	155153
Lab ID:	214850-008	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.0	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	6.8	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	20	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	32	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	6.5	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.7	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-9-9C1	Batch#:	155153
Lab ID:	214850-008	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	0.5	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-510-9C1	Batch#:	155153
Lab ID:	214850-009	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-510-9C1	Batch#:	155153
Lab ID:	214850-009	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	122 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091109A	Batch#:	155153
Lab ID:	214850-010	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091109A	Batch#:	155153
Lab ID:	214850-010	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	109	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-79C-9C1	Batch#:	155153
Lab ID:	214850-011	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.9	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	6.5	0.5	
Trichloroethene	2.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	2.6	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.0	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-79C-9C1	Batch#:	155153
Lab ID:	214850-011	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-33A-9C1	Batch#:	155193
Lab ID:	214850-012	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	3.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.5	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	27	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	13	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	78	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	2.5	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	3.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-33A-9C1	Batch#:	155193
Lab ID:	214850-012	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-512-9C1	Batch#:	155193
Lab ID:	214850-013	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	3.7	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	26	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	12	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	76	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	2.4	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	3.7	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-512-9C1	Batch#:	155193
Lab ID:	214850-013	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	113	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-29A-9C1	Batch#:	155193
Lab ID:	214850-014	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	2.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.8	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-29A-9C1	Batch#:	155193
Lab ID:	214850-014	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-103C-9C1	Batch#:	155193
Lab ID:	214850-015	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D2
Chloromethane	ND	2.0	D2
Vinyl Chloride	ND	1.0	D2
Bromomethane	ND	2.0	D2
Chloroethane	ND	2.0	D2
Trichlorofluoromethane	ND	2.0	D2
Iodomethane	ND	20	D2
Acetone	ND	20	D2
1,1-Dichloroethene	3.9	1.0	D2
Methylene Chloride	ND	20	D2
Carbon Disulfide	ND	1.0	D2
MTBE	ND	1.0	D2
trans-1,2-Dichloroethene	ND	1.0	D2
Vinyl Acetate	ND	20	D2
1,1-Dichloroethane	ND	1.0	D2
2-Butanone	ND	20	D2
cis-1,2-Dichloroethene	24	1.0	D2
2,2-Dichloropropane	ND	1.0	D2
Chloroform	2.9	1.0	D2
Bromochloromethane	ND	1.0	D2
1,1,1-Trichloroethane	ND	1.0	D2
1,1-Dichloropropene	ND	1.0	D2
Carbon Tetrachloride	ND	1.0	D2
1,2-Dichloroethane	ND	1.0	D2
Benzene	ND	1.0	D2
Trichloroethene	140	1.0	D2
1,2-Dichloropropane	ND	1.0	D2
Bromodichloromethane	ND	1.0	D2
Dibromomethane	ND	1.0	D2
4-Methyl-2-Pentanone	ND	20	D2 V9
cis-1,3-Dichloropropene	ND	1.0	D2
Toluene	ND	1.0	D2
trans-1,3-Dichloropropene	ND	1.0	D2
1,1,2-Trichloroethane	ND	1.0	D2
2-Hexanone	ND	20	D2 V9
1,3-Dichloropropane	ND	1.0	D2
Tetrachloroethene	2.9	1.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-103C-9C1	Batch#:	155193
Lab ID:	214850-015	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D2
1,2-Dibromoethane	ND	1.0	D2
Chlorobenzene	ND	1.0	D2
1,1,1,2-Tetrachloroethane	ND	1.0	D2
Ethylbenzene	ND	1.0	D2
m,p-Xylenes	ND	1.0	D2
o-Xylene	ND	1.0	D2
Styrene	ND	1.0	D2
Bromoform	ND	2.0	D2
Isopropylbenzene	ND	1.0	D2
1,1,2,2-Tetrachloroethane	ND	1.0	D2
1,2,3-Trichloropropane	ND	1.0	D2
Propylbenzene	ND	1.0	D2
Bromobenzene	ND	1.0	D2
1,3,5-Trimethylbenzene	ND	1.0	D2
2-Chlorotoluene	ND	1.0	D2
4-Chlorotoluene	ND	1.0	D2
tert-Butylbenzene	ND	1.0	D2
1,2,4-Trimethylbenzene	ND	1.0	D2
sec-Butylbenzene	ND	1.0	D2
para-Isopropyl Toluene	ND	1.0	D2
1,3-Dichlorobenzene	ND	1.0	D2
1,4-Dichlorobenzene	ND	1.0	D2
n-Butylbenzene	ND	1.0	D2
1,2-Dichlorobenzene	ND	1.0	D2
1,2-Dibromo-3-Chloropropane	ND	4.0	D2
1,2,4-Trichlorobenzene	ND	1.0	D2
Hexachlorobutadiene	ND	4.0	D2 V9
Naphthalene	ND	4.0	D2
1,2,3-Trichlorobenzene	ND	1.0	D2
Xylene (total)	ND	1.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-514-9C1	Batch#:	155193
Lab ID:	214850-016	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-514-9C1	Batch#:	155193
Lab ID:	214850-016	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-103A-9C1	Batch#:	155193
Lab ID:	214850-017	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.9	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.0	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	6.8	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.7	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-103A-9C1	Batch#:	155193
Lab ID:	214850-017	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-12-9C1	Batch#:	155193
Lab ID:	214850-018	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.3	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	4.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	0.5	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.0	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-12-9C1	Batch#:	155193
Lab ID:	214850-018	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	25.09	100	56-140	
Chloromethane	25.00	24.06	96	46-142	
Vinyl Chloride	25.00	25.18	101	49-136	
Bromomethane	25.00	30.49 b	122	42-154	V3
Chloroethane	25.00	25.43	102	51-133	
Trichlorofluoromethane	25.00	22.49	90	63-135	
Iodomethane	25.00	28.96	116	70-130	
Acetone	25.00	21.26	85	48-130	
1,1-Dichloroethene	25.00	24.39	98	68-133	
Methylene Chloride	25.00	25.20	101	71-120	
Carbon Disulfide	25.00	23.13	93	56-120	
MTBE	25.00	23.53	94	58-120	
trans-1,2-Dichloroethene	25.00	26.34	105	80-120	
Vinyl Acetate	25.00	22.50	90	63-124	
1,1-Dichloroethane	25.00	25.06	100	77-120	
2-Butanone	25.00	22.39	90	57-120	
cis-1,2-Dichloroethene	25.00	24.90	100	75-120	
2,2-Dichloropropane	25.00	24.54	98	72-128	
Chloroform	25.00	22.81	91	78-120	
Bromochloromethane	25.00	25.78	103	78-120	
1,1,1-Trichloroethane	25.00	23.56	94	78-120	
1,1-Dichloropropene	25.00	23.29	93	75-120	
Carbon Tetrachloride	25.00	21.51	86	80-120	
1,2-Dichloroethane	25.00	22.00	88	74-120	
Benzene	25.00	24.80	99	77-120	
Trichloroethene	25.00	23.39	94	78-122	
1,2-Dichloropropane	25.00	23.78	95	76-120	
Bromodichloromethane	25.00	23.44	94	78-120	
Dibromomethane	25.00	23.45	94	77-120	
4-Methyl-2-Pentanone	25.00	20.17	81	65-120	
cis-1,3-Dichloropropene	25.00	25.57	102	76-120	
Toluene	25.00	24.09	96	73-120	
trans-1,3-Dichloropropene	25.00	22.55	90	72-120	
1,1,2-Trichloroethane	25.00	24.65	99	76-120	
2-Hexanone	25.00	19.54 b	78	57-121	V9
1,3-Dichloropropane	25.00	24.55	98	75-120	
Tetrachloroethene	25.00	22.04	88	77-120	
Dibromochloromethane	25.00	23.68	95	76-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513025	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	24.06	96	77-120	
Chlorobenzene	25.00	23.61	94	78-120	
1,1,1,2-Tetrachloroethane	25.00	22.87	91	77-120	
Ethylbenzene	25.00	23.81	95	78-120	
m,p-Xylenes	50.00	49.03	98	77-120	
o-Xylene	25.00	23.71	95	77-120	
Styrene	25.00	24.73	99	77-120	
Bromoform	25.00	22.01	88	74-121	
Isopropylbenzene	25.00	21.70	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.17	101	73-120	
1,2,3-Trichloropropane	25.00	25.39	102	72-120	
Propylbenzene	25.00	23.58	94	76-120	
Bromobenzene	25.00	24.49	98	75-120	
1,3,5-Trimethylbenzene	25.00	25.43	102	77-120	
2-Chlorotoluene	25.00	25.33	101	76-120	
4-Chlorotoluene	25.00	24.51	98	78-120	
tert-Butylbenzene	25.00	21.43	86	76-120	
1,2,4-Trimethylbenzene	25.00	26.06	104	77-120	
sec-Butylbenzene	25.00	21.16	85	80-120	
para-Isopropyl Toluene	25.00	22.04	88	76-120	
1,3-Dichlorobenzene	25.00	23.90	96	75-120	
1,4-Dichlorobenzene	25.00	23.54	94	77-120	
n-Butylbenzene	25.00	29.02	116	76-120	
1,2-Dichlorobenzene	25.00	24.16	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.86	95	65-120	
1,2,4-Trichlorobenzene	25.00	23.44	94	73-121	
Hexachlorobutadiene	25.00	20.08	80	73-123	
Naphthalene	25.00	25.89	104	62-121	
1,2,3-Trichlorobenzene	25.00	24.60	98	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	102	78-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513026	Batch#:	155153
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	121 *	78-120	S3

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513027

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	27.44	110	56-140	
Chloromethane	<0.2000	25.00	27.59	110	46-142	
Vinyl Chloride	<0.1000	25.00	28.18	113	49-136	
Bromomethane	<0.2000	25.00	33.33 b	133	42-154	V3
Chloroethane	<0.2000	25.00	28.30	113	51-133	
Trichlorofluoromethane	<0.2000	25.00	24.84	99	63-135	
Iodomethane	<2.000	25.00	30.99	124	60-140	
Acetone	<1.000	25.00	22.92	92	48-130	
1,1-Dichloroethene	<0.1000	25.00	27.97	112	68-133	
Methylene Chloride	0.3266	25.00	27.21	108	71-120	
Carbon Disulfide	<0.1000	25.00	26.98	108	56-120	
MTBE	<0.1000	25.00	24.62	98	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	28.94	116	80-120	
Vinyl Acetate	<2.000	25.00	24.66	99	63-124	
1,1-Dichloroethane	<0.1000	25.00	28.24	113	77-120	
2-Butanone	<2.000	25.00	24.62	98	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	26.98	108	75-120	
2,2-Dichloropropane	<0.1000	25.00	28.33	113	72-128	
Chloroform	0.1148	25.00	25.52	102	78-120	
Bromochloromethane	<0.1000	25.00	27.36	109	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	27.42	110	78-120	
1,1-Dichloropropene	<0.1000	25.00	26.74	107	75-120	
Carbon Tetrachloride	<0.1000	25.00	24.70	99	80-120	
1,2-Dichloroethane	<0.1000	25.00	24.03	96	74-120	
Benzene	<0.1000	25.00	26.89	108	77-120	
Trichloroethene	<0.1000	25.00	25.64	103	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.58	102	76-120	
Bromodichloromethane	<0.1000	25.00	24.97	100	78-120	
Dibromomethane	<0.1000	25.00	24.50	98	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.13	85	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	26.66	107	76-120	
Toluene	0.2653	25.00	25.77	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.46	94	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.39	102	76-120	
2-Hexanone	<2.000	25.00	20.07 b	80	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.59	102	75-120	
Tetrachloroethene	<0.1316	25.00	24.31	97	77-120	
Dibromochloromethane	<0.1000	25.00	24.30	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.34	97	77-120	
Chlorobenzene	<0.1000	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.25	97	77-120	
Ethylbenzene	<0.1000	25.00	26.24	105	78-120	
m,p-Xylenes	<0.1594	50.00	53.82	108	77-120	
o-Xylene	<0.1000	25.00	25.77	103	77-120	
Styrene	<0.1000	25.00	26.58	106	77-120	
Bromoform	<0.2000	25.00	22.41	90	74-121	
Isopropylbenzene	<0.1000	25.00	23.65	95	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.09	100	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC		Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.03	104		72-120	
Propylbenzene	<0.1000	25.00	26.63	107		76-120	
Bromobenzene	<0.1000	25.00	24.37	97		75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.61	106		77-120	
2-Chlorotoluene	<0.1000	25.00	27.05	108		76-120	
4-Chlorotoluene	<0.1000	25.00	26.34	105		78-120	
tert-Butylbenzene	<0.1000	25.00	24.61	98		76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.76	107		77-120	
sec-Butylbenzene	<0.1029	25.00	24.42	98		80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.42	94		76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.18	101		75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.68	99		77-120	
n-Butylbenzene	<0.1285	25.00	31.43	126	*	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.19	101		76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.00	96		65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	23.55	94		73-121	
Hexachlorobutadiene	<0.4000	25.00	22.13	89		73-123	
Naphthalene	<0.4000	25.00	25.49	102		62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	24.19	97		66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	27.26	109	56-140	1	24	
Chloromethane	25.00	27.66	111	46-142	0	24	
Vinyl Chloride	25.00	28.73	115	49-136	2	24	
Bromomethane	25.00	32.55 b	130	42-154	2	24	V3
Chloroethane	25.00	27.91	112	51-133	1	25	
Trichlorofluoromethane	25.00	23.79	95	63-135	4	20	
Iodomethane	25.00	32.18	129	60-140	4	30	
Acetone	25.00	23.98	96	48-130	5	41	
1,1-Dichloroethene	25.00	27.76	111	68-133	1	20	
Methylene Chloride	25.00	26.94	106	71-120	1	20	
Carbon Disulfide	25.00	26.28	105	56-120	3	20	
MTBE	25.00	25.07	100	58-120	2	21	
trans-1,2-Dichloroethene	25.00	28.24	113	80-120	2	24	
Vinyl Acetate	25.00	24.61	98	63-124	0	24	
1,1-Dichloroethane	25.00	27.38	110	77-120	3	20	
2-Butanone	25.00	24.07	96	57-120	2	32	
cis-1,2-Dichloroethene	25.00	26.43	106	75-120	2	20	
2,2-Dichloropropane	25.00	27.44	110	72-128	3	24	
Chloroform	25.00	24.72	98	78-120	3	20	
Bromochloromethane	25.00	26.88	108	78-120	2	20	
1,1,1-Trichloroethane	25.00	26.42	106	78-120	4	20	
1,1-Dichloropropene	25.00	26.16	105	75-120	2	21	
Carbon Tetrachloride	25.00	23.90	96	80-120	3	21	
1,2-Dichloroethane	25.00	23.54	94	74-120	2	20	
Benzene	25.00	26.27	105	77-120	2	20	
Trichloroethene	25.00	24.84	99	78-122	3	20	
1,2-Dichloropropane	25.00	25.13	101	76-120	2	20	
Bromodichloromethane	25.00	24.74	99	78-120	1	20	
Dibromomethane	25.00	24.35	97	77-120	1	20	
4-Methyl-2-Pentanone	25.00	21.17	85	65-120	0	22	
cis-1,3-Dichloropropene	25.00	26.38	106	76-120	1	20	
Toluene	25.00	25.38	100	73-120	2	20	
trans-1,3-Dichloropropene	25.00	23.28	93	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.46	102	76-120	0	20	
2-Hexanone	25.00	20.17 b	81	57-121	1	25	V9
1,3-Dichloropropane	25.00	25.43	102	75-120	1	20	
Tetrachloroethene	25.00	23.62	94	77-120	3	20	
Dibromochloromethane	25.00	24.22	97	76-120	0	20	
1,2-Dibromoethane	25.00	24.55	98	77-120	1	20	
Chlorobenzene	25.00	24.47	98	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	23.74	95	77-120	2	20	
Ethylbenzene	25.00	25.52	102	78-120	3	26	
m,p-Xylenes	50.00	52.06	104	77-120	3	20	
o-Xylene	25.00	24.87	99	77-120	4	20	
Styrene	25.00	25.65	103	77-120	4	20	
Bromoform	25.00	21.99	88	74-121	2	21	
Isopropylbenzene	25.00	23.34	93	71-120	1	20	
1,1,2,2-Tetrachloroethane	25.00	25.64	103	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-21C-9C1	Batch#:	155153
MSS Lab ID:	214805-007	Sampled:	09/08/09
Matrix:	Water	Received:	09/10/09
Units:	ug/L	Analyzed:	09/22/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	26.64	107	72-120	2	20	
Propylbenzene	25.00	26.01	104	76-120	2	20	
Bromobenzene	25.00	24.70	99	75-120	1	20	
1,3,5-Trimethylbenzene	25.00	26.85	107	77-120	1	20	
2-Chlorotoluene	25.00	27.09	108	76-120	0	20	
4-Chlorotoluene	25.00	25.94	104	78-120	2	20	
tert-Butylbenzene	25.00	23.48	94	76-120	5	21	
1,2,4-Trimethylbenzene	25.00	26.76	107	77-120	0	20	
sec-Butylbenzene	25.00	23.55	94	80-120	4	21	
para-Isopropyl Toluene	25.00	23.59	94	76-120	1	20	
1,3-Dichlorobenzene	25.00	24.65	99	75-120	2	20	
1,4-Dichlorobenzene	25.00	24.45	98	77-120	1	23	
n-Butylbenzene	25.00	31.68	127 *	76-120	1	21	M1
1,2-Dichlorobenzene	25.00	24.99	100	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	25.12	100	65-120	5	22	
1,2,4-Trichlorobenzene	25.00	23.49	94	73-121	0	20	
Hexachlorobutadiene	25.00	22.28	89	73-123	1	25	
Naphthalene	25.00	26.42	106	62-121	4	32	
1,2,3-Trichlorobenzene	25.00	24.86	99	66-123	3	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513189	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.28	109	56-140	
Chloromethane	25.00	23.09	92	46-142	
Vinyl Chloride	25.00	24.96	100	49-136	
Bromomethane	25.00	22.91	92	42-154	
Chloroethane	25.00	27.24	109	51-133	
Trichlorofluoromethane	25.00	24.65	99	63-135	
Iodomethane	25.00	22.30	89	70-130	
Acetone	25.00	21.59	86	48-130	
1,1-Dichloroethene	25.00	26.43	106	68-133	
Methylene Chloride	25.00	25.95	104	71-120	
Carbon Disulfide	25.00	24.83	99	56-120	
MTBE	25.00	23.09	92	58-120	
trans-1,2-Dichloroethene	25.00	28.33	113	80-120	
Vinyl Acetate	25.00	21.20	85	63-124	
1,1-Dichloroethane	25.00	26.80	107	77-120	
2-Butanone	25.00	21.69	87	57-120	
cis-1,2-Dichloroethene	25.00	26.57	106	75-120	
2,2-Dichloropropane	25.00	23.90	96	72-128	
Chloroform	25.00	24.62	98	78-120	
Bromochloromethane	25.00	27.14	109	78-120	
1,1,1-Trichloroethane	25.00	25.84	103	78-120	
1,1-Dichloropropene	25.00	24.98	100	75-120	
Carbon Tetrachloride	25.00	23.48	94	80-120	
1,2-Dichloroethane	25.00	22.74	91	74-120	
Benzene	25.00	26.43	106	77-120	
Trichloroethene	25.00	25.32	101	78-122	
1,2-Dichloropropane	25.00	25.21	101	76-120	
Bromodichloromethane	25.00	24.79	99	78-120	
Dibromomethane	25.00	23.72	95	77-120	
4-Methyl-2-Pentanone	25.00	19.32 b	77	65-120	V9
cis-1,3-Dichloropropene	25.00	26.17	105	76-120	
Toluene	25.00	25.19	101	73-120	
trans-1,3-Dichloropropene	25.00	22.56	90	72-120	
1,1,2-Trichloroethane	25.00	25.09	100	76-120	
2-Hexanone	25.00	18.40 b	74	57-121	V9
1,3-Dichloropropane	25.00	25.16	101	75-120	
Tetrachloroethene	25.00	23.26	93	77-120	
Dibromochloromethane	25.00	24.29	97	76-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513189	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	24.15	97	77-120	
Chlorobenzene	25.00	24.93	100	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.39	98	77-120	
Ethylbenzene	25.00	25.20	101	78-120	
m,p-Xylenes	50.00	51.09	102	77-120	
o-Xylene	25.00	24.62	98	77-120	
Styrene	25.00	25.39	102	77-120	
Bromoform	25.00	21.91	88	74-121	
Isopropylbenzene	25.00	23.32	93	71-120	
1,1,2,2-Tetrachloroethane	25.00	24.69	99	73-120	
1,2,3-Trichloropropane	25.00	26.17	105	72-120	
Propylbenzene	25.00	24.95	100	76-120	
Bromobenzene	25.00	25.99	104	75-120	
1,3,5-Trimethylbenzene	25.00	26.45	106	77-120	
2-Chlorotoluene	25.00	26.95	108	76-120	
4-Chlorotoluene	25.00	25.76	103	78-120	
tert-Butylbenzene	25.00	22.61	90	76-120	
1,2,4-Trimethylbenzene	25.00	27.03	108	77-120	
sec-Butylbenzene	25.00	21.97	88	80-120	
para-Isopropyl Toluene	25.00	22.50	90	76-120	
1,3-Dichlorobenzene	25.00	24.86	99	75-120	
1,4-Dichlorobenzene	25.00	24.37	97	77-120	
n-Butylbenzene	25.00	29.42	118	76-120	
1,2-Dichlorobenzene	25.00	24.85	99	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.75	95	65-120	
1,2,4-Trichlorobenzene	25.00	22.95	92	73-121	
Hexachlorobutadiene	25.00	19.56 b	78	73-123	V9
Naphthalene	25.00	25.60	102	62-121	
1,2,3-Trichlorobenzene	25.00	24.06	96	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	104	78-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513190	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513190	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513213

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	27.36	109	56-140	
Chloromethane	<0.2000	25.00	28.82	115	46-142	
Vinyl Chloride	<0.1000	25.00	29.97	120	49-136	
Bromomethane	<0.2000	25.00	26.02	104	42-154	
Chloroethane	<0.2000	25.00	28.78	115	51-133	
Trichlorofluoromethane	<0.2000	25.00	27.14	109	63-135	
Iodomethane	<2.000	25.00	27.74	111	60-140	
Acetone	<1.000	25.00	25.60	102	48-130	
1,1-Dichloroethene	0.3522	25.00	28.39	112	68-133	
Methylene Chloride	0.1853	25.00	28.07	112	71-120	
Carbon Disulfide	<0.1000	25.00	27.86	111	56-120	
MTBE	<0.1000	25.00	25.05	100	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	30.20	121 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.57	82	63-124	
1,1-Dichloroethane	0.1000	25.00	29.91	119	77-120	
2-Butanone	<2.000	25.00	24.94	100	57-120	
cis-1,2-Dichloroethene	0.8774	25.00	28.71	111	75-120	
2,2-Dichloropropane	<0.1000	25.00	25.83	103	72-128	
Chloroform	0.4176	25.00	27.62	109	78-120	
Bromochloromethane	<0.1000	25.00	28.42	114	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	29.08	116	78-120	
1,1-Dichloropropene	<0.1000	25.00	27.07	108	75-120	
Carbon Tetrachloride	<0.1000	25.00	25.71	103	80-120	
1,2-Dichloroethane	<0.1000	25.00	24.80	99	74-120	
Benzene	<0.1000	25.00	27.66	111	77-120	
Trichloroethene	3.162	25.00	29.88	107	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.53	106	76-120	
Bromodichloromethane	<0.1000	25.00	26.02	104	78-120	
Dibromomethane	<0.1000	25.00	25.11	100	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.44 b	86	65-120	V9
cis-1,3-Dichloropropene	<0.1000	25.00	26.98	108	76-120	
Toluene	<0.1000	25.00	25.61	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	22.72	91	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.44	102	76-120	
2-Hexanone	<2.000	25.00	19.20 b	77	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.70	103	75-120	
Tetrachloroethene	0.4285	25.00	23.92	94	77-120	
Dibromochloromethane	<0.1000	25.00	24.31	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.12	96	77-120	
Chlorobenzene	<0.1000	25.00	24.93	100	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.19	97	77-120	
Ethylbenzene	<0.1000	25.00	26.13	105	78-120	
m,p-Xylenes	<0.1594	50.00	51.31	103	77-120	
o-Xylene	<0.1000	25.00	24.77	99	77-120	
Styrene	<0.1000	25.00	24.00	96	77-120	
Bromoform	<0.2000	25.00	22.09	88	74-121	
Isopropylbenzene	<0.1000	25.00	24.21	97	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	26.17	105	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	28.56	114	72-120	
Propylbenzene	<0.1000	25.00	25.45	102	76-120	
Bromobenzene	<0.1000	25.00	26.30	105	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	27.49	110	77-120	
2-Chlorotoluene	<0.1000	25.00	28.17	113	76-120	
4-Chlorotoluene	<0.1000	25.00	26.41	106	78-120	
tert-Butylbenzene	<0.1000	25.00	22.65	91	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	28.11	112	77-120	
sec-Butylbenzene	<0.1029	25.00	22.68	91	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.81	95	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.11	100	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.46	98	77-120	
n-Butylbenzene	<0.1285	25.00	33.41	134 *	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.10	100	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	25.40	102	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	24.23	97	73-121	
Hexachlorobutadiene	<0.4000	25.00	21.20 b	85	73-123	V9
Naphthalene	<0.4000	25.00	27.48	110	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	25.80	103	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513214

Analyte	Spiked	Result		%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	26.67		107	56-140	3	24	
Chloromethane	25.00	28.88		116	46-142	0	24	
Vinyl Chloride	25.00	29.67		119	49-136	1	24	
Bromomethane	25.00	27.31		109	42-154	5	24	
Chloroethane	25.00	28.14		113	51-133	2	25	
Trichlorofluoromethane	25.00	25.79		103	63-135	5	20	
Iodomethane	25.00	30.22		121	60-140	9	30	
Acetone	25.00	25.43		102	48-130	1	41	
1,1-Dichloroethene	25.00	28.24		112	68-133	1	20	
Methylene Chloride	25.00	27.09		108	71-120	4	20	
Carbon Disulfide	25.00	26.55		106	56-120	5	20	
MTBE	25.00	25.16		101	58-120	0	21	
trans-1,2-Dichloroethene	25.00	29.51		118	80-120	2	24	
Vinyl Acetate	25.00	20.35		81	63-124	1	24	
1,1-Dichloroethane	25.00	28.60		114	77-120	4	20	
2-Butanone	25.00	24.63		99	57-120	1	32	
cis-1,2-Dichloroethene	25.00	28.12		109	75-120	2	20	
2,2-Dichloropropane	25.00	24.71		99	72-128	4	24	
Chloroform	25.00	26.36		104	78-120	5	20	
Bromochloromethane	25.00	27.50		110	78-120	3	20	
1,1,1-Trichloroethane	25.00	28.04		112	78-120	4	20	
1,1-Dichloropropene	25.00	26.01		104	75-120	4	21	
Carbon Tetrachloride	25.00	24.24		97	80-120	6	21	
1,2-Dichloroethane	25.00	24.07		96	74-120	3	20	
Benzene	25.00	26.72		107	77-120	3	20	
Trichloroethene	25.00	28.93		103	78-122	3	20	
1,2-Dichloropropane	25.00	25.69		103	76-120	3	20	
Bromodichloromethane	25.00	25.45		102	78-120	2	20	
Dibromomethane	25.00	24.65		99	77-120	2	20	
4-Methyl-2-Pentanone	25.00	21.51	b	86	65-120	0	22	V9
cis-1,3-Dichloropropene	25.00	26.35		105	76-120	2	20	
Toluene	25.00	24.73		99	73-120	3	20	
trans-1,3-Dichloropropene	25.00	22.51		90	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.24		101	76-120	1	20	
2-Hexanone	25.00	19.57	b	78	57-121	2	25	V9
1,3-Dichloropropane	25.00	25.38		102	75-120	1	20	
Tetrachloroethene	25.00	23.19		91	77-120	3	20	
Dibromochloromethane	25.00	23.82		95	76-120	2	20	
1,2-Dibromoethane	25.00	24.12		96	77-120	0	20	
Chlorobenzene	25.00	24.31		97	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	23.68		95	77-120	2	20	
Ethylbenzene	25.00	25.07		100	78-120	4	26	
m,p-Xylenes	50.00	49.26		99	77-120	4	20	
o-Xylene	25.00	23.69		95	77-120	4	20	
Styrene	25.00	22.77		91	77-120	5	20	
Bromoform	25.00	21.61		86	74-121	2	21	
Isopropylbenzene	25.00	23.33		93	71-120	4	20	
1,1,2,2-Tetrachloroethane	25.00	26.31		105	73-120	1	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214850	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	28.48	114	72-120	0	20	
Propylbenzene	25.00	24.70	99	76-120	3	20	
Bromobenzene	25.00	25.41	102	75-120	3	20	
1,3,5-Trimethylbenzene	25.00	27.70	111	77-120	1	20	
2-Chlorotoluene	25.00	26.98	108	76-120	4	20	
4-Chlorotoluene	25.00	25.43	102	78-120	4	20	
tert-Butylbenzene	25.00	22.14	89	76-120	2	21	
1,2,4-Trimethylbenzene	25.00	28.31	113	77-120	1	20	
sec-Butylbenzene	25.00	22.30	89	80-120	2	21	
para-Isopropyl Toluene	25.00	24.14	97	76-120	1	20	
1,3-Dichlorobenzene	25.00	24.32	97	75-120	3	20	
1,4-Dichlorobenzene	25.00	23.79	95	77-120	3	23	
n-Butylbenzene	25.00	33.34	133 *	76-120	0	21	M1
1,2-Dichlorobenzene	25.00	24.78	99	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	24.98	100	65-120	2	22	
1,2,4-Trichlorobenzene	25.00	24.26	97	73-121	0	20	
Hexachlorobutadiene	25.00	21.19 b	85	73-123	0	25	V9
Naphthalene	25.00	27.71	111	62-121	1	32	
1,2,3-Trichlorobenzene	25.00	25.84	103	66-123	0	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214850 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214850 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839382075009 File : kim09 Time : 22-SEP-2009 11:11

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13985	15.86	
75	30% - 60% of mass 95	40908	46.38	
95		88202	100.00	
96	5% - 9% of mass 95	5034	5.71	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	66128	74.97	
175	5% - 9% of mass 174	4773	7.22	
176	> 95% and < 101% of mass 174	64261	97.18	
177	5% - 9% of mass 176	4364	6.79	

Analyst: BO Date: 09/22/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS BFB TUNE FOR 214850 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839383527002 File : kin02 Time : 23-SEP-2009 08:31

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	12007	15.89	
75	30% - 60% of mass 95	35141	46.51	
95		75562	100.00	
96	5% - 9% of mass 95	5374	7.11	
173	< 2% of mass 174	164	0.27	
174	> 50% and < 100% of mass 95	59744	79.07	
175	5% - 9% of mass 174	4335	7.26	
176	> 95% and < 101% of mass 174	57358	96.01	
177	5% - 9% of mass 176	3513	6.12	

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/24/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214850 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214850 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214850 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513025 IDF : 1.0
Seqnum : 839382075010.4 File : kim10 Time : 22-SEP-2009 11:24
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5374	25.00	25.09	ug/L	0	20	0.0500	u
Chloromethane	0.5160	0.4967	25.00	24.06	ug/L	-4	20	0.1000	u
Vinyl Chloride	0.5175	0.5211	25.00	25.18	ug/L	1	20	0.0500	u
Bromomethane	0.2608	0.3181	25.00	30.49	ug/L	**22**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4165	25.00	25.43	ug/L	2	20	0.0500	u
Trichlorofluoromethane	0.7415	0.6672	25.00	22.49	ug/L	-10	20	0.0500	u
Iodomethane	0.2599	0.3068	25.00	28.96	ug/L	16	20	0.0500	u
Acetone	0.1382	0.1175	25.00	21.26	ug/L	-15	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3656	25.00	24.39	ug/L	-2	20	0.0500	u
Methylene Chloride	0.5280	0.5322	25.00	25.20	ug/L	1	20	0.0500	u
Carbon Disulfide	1.4090	1.3035	25.00	23.13	ug/L	-7	20	0.0500	u
MTBE	1.5447	1.4539	25.00	23.53	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.4808	25.00	26.34	ug/L	5	20	0.0500	u
Vinyl Acetate	0.9726	0.8755	25.00	22.50	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9426	25.00	25.06	ug/L	0	20	0.1000	u
2-Butanone	0.2331	0.2087	25.00	22.39	ug/L	-10	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5420	25.00	24.90	ug/L	0	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7002	25.00	24.54	ug/L	-2	20	0.0500	u
Chloroform	0.9238	0.8427	25.00	22.81	ug/L	-9	20	0.0500	u
Bromochloromethane	0.2354	0.2428	25.00	25.78	ug/L	3	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.6628	25.00	23.56	ug/L	-6	20	0.0500	u
1,1-Dichloropropene	0.4217	0.3928	25.00	23.29	ug/L	-7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.2997	25.00	21.51	ug/L	-14	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3866	25.00	22.00	ug/L	-12	20	0.0500	u
Benzene	1.3404	1.3296	25.00	24.80	ug/L	-1	20	0.0500	u
Trichloroethene	0.3158	0.2955	25.00	23.39	ug/L	-6	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3419	25.00	23.78	ug/L	-5	20	0.0500	u
Bromodichloromethane	0.3863	0.3622	25.00	23.44	ug/L	-6	20	0.0500	u
Dibromomethane	0.1802	0.1690	25.00	23.45	ug/L	-6	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2456	25.00	20.17	ug/L	-19	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5285	25.00	25.57	ug/L	2	20	0.0500	u
Toluene	0.9593	0.9242	25.00	24.09	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5168	25.00	22.55	ug/L	-10	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1725	25.00	24.65	ug/L	-1	20	0.0500	u
2-Hexanone	0.2445	0.1911	25.00	19.54	ug/L	**-22**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.6023	25.00	24.55	ug/L	-2	20	0.0500	u
Tetrachloroethene	0.3329	0.2934	25.00	22.04	ug/L	-12	20	0.0500	u
Dibromochloromethane	0.3027	0.2868	25.00	23.68	ug/L	-5	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2934	25.00	24.06	ug/L	-4	20	0.0500	u
Chlorobenzene	1.0519	0.9935	25.00	23.61	ug/L	-6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3071	25.00	22.87	ug/L	-9	20	0.0500	u
Ethylbenzene	1.8115	1.7256	25.00	23.81	ug/L	-5	20	0.0500	u
m,p-Xylenes	0.6304	0.6182	50.00	49.03	ug/L	-2	20	0.0500	u
o-Xylene	0.6283	0.5958	25.00	23.71	ug/L	-5	20	0.0500	u
Styrene	1.0367	1.0254	25.00	24.73	ug/L	-1	20	0.0500	u
Bromoform	0.1849	0.1874	25.00	22.01	ug/L	-12	20	0.1000	u
Isopropylbenzene	3.8595	3.3494	25.00	21.70	ug/L	-13	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9652	25.00	25.17	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0393	25.00	25.39	ug/L	2	20	0.0500	u
Propylbenzene	3.9448	3.7203	25.00	23.58	ug/L	-6	20	0.0500	u
Bromobenzene	1.0220	1.0012	25.00	24.49	ug/L	-2	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.7898	25.00	25.43	ug/L	2	20	0.0500	u
2-Chlorotoluene	3.1099	3.1506	25.00	25.33	ug/L	1	20	0.0500	u
4-Chlorotoluene	2.6572	2.6050	25.00	24.51	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.8614	25.00	21.43	ug/L	-14	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.7503	25.00	26.06	ug/L	4	20	0.0500	u
sec-Butylbenzene	3.1284	2.6477	25.00	21.16	ug/L	-15	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.1983	25.00	22.04	ug/L	-12	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6155	25.00	23.90	ug/L	-4	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5576	25.00	23.54	ug/L	-6	20	0.0500	u
n-Butylbenzene	2.4331	2.3610	25.00	29.02	ug/L	16	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.5576	25.00	24.16	ug/L	-3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1679	25.00	23.86	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.0197	25.00	23.44	ug/L	-6	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3513	25.00	20.08	ug/L	-20	20	0.0500	u
Naphthalene	2.7279	2.8247	25.00	25.89	ug/L	4	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9918	25.00	24.60	ug/L	-2	20	0.0500	u
Dibromofluoromethane	0.4472	0.4622	50.00	51.68	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3432	50.00	45.92	ug/L	-8	20	0.0500	u
Toluene-d8	1.4811	1.5568	50.00	52.55	ug/L	5	20	0.0500	u
Bromofluorobenzene	1.2424	1.2647	50.00	50.90	ug/L	2	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1771090	17.66	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3063159	25.18	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2626334	22.95	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1004184	2.11	17.10	17.10	0.00

BO 09/22/09 : Standard ID fixed in LIMS [general version]

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/25/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214850 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513189 IDF : 1.0
Seqnum : 839383527003.1 File : kin03 Time : 23-SEP-2009 08:44
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5842	25.00	27.28	ug/L	9	20	0.0500	u
Chloromethane	0.5160	0.4765	25.00	23.09	ug/L	-8	20	0.1000	u
Vinyl Chloride	0.5175	0.5166	25.00	24.96	ug/L	0	20	0.0500	u
Bromomethane	0.2608	0.2390	25.00	22.91	ug/L	-8	20	0.0500	u
Chloroethane	0.4094	0.4461	25.00	27.24	ug/L	9	20	0.0500	u
Trichlorofluoromethane	0.7415	0.7310	25.00	24.65	ug/L	-1	20	0.0500	u
Iodomethane	0.2599	0.2285	25.00	22.30	ug/L	-11	20	0.0500	u
Acetone	0.1382	0.1193	25.00	21.59	ug/L	-14	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3962	25.00	26.43	ug/L	6	20	0.0500	u
Methylene Chloride	0.5280	0.5480	25.00	25.95	ug/L	4	20	0.0500	u
Carbon Disulfide	1.4090	1.3992	25.00	24.83	ug/L	-1	20	0.0500	u
MTBE	1.5447	1.4267	25.00	23.09	ug/L	-8	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5172	25.00	28.33	ug/L	13	20	0.0500	u
Vinyl Acetate	0.9726	0.8248	25.00	21.20	ug/L	-15	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0082	25.00	26.80	ug/L	7	20	0.1000	u
2-Butanone	0.2331	0.2022	25.00	21.69	ug/L	-13	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5782	25.00	26.57	ug/L	6	20	0.0500	u
2,2-Dichloropropane	0.7134	0.6819	25.00	23.90	ug/L	-4	20	0.0500	u
Chloroform	0.9238	0.9097	25.00	24.62	ug/L	-2	20	0.0500	u
Bromochloromethane	0.2354	0.2556	25.00	27.14	ug/L	9	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7270	25.00	25.84	ug/L	3	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4213	25.00	24.98	ug/L	0	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3272	25.00	23.48	ug/L	-6	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3996	25.00	22.74	ug/L	-9	20	0.0500	u
Benzene	1.3404	1.4169	25.00	26.43	ug/L	6	20	0.0500	u
Trichloroethene	0.3158	0.3198	25.00	25.32	ug/L	1	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3625	25.00	25.21	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3863	0.3831	25.00	24.79	ug/L	-1	20	0.0500	u
Dibromomethane	0.1802	0.1709	25.00	23.72	ug/L	-5	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2353	25.00	19.32	ug/L	**-23**	20	0.0500	c- u ***
cis-1,3-Dichloropropene	0.5168	0.5409	25.00	26.17	ug/L	5	20	0.0500	u
Toluene	0.9593	0.9667	25.00	25.19	ug/L	1	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5172	25.00	22.56	ug/L	-10	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1755	25.00	25.09	ug/L	0	20	0.0500	u
2-Hexanone	0.2445	0.1800	25.00	18.40	ug/L	**-26**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.6172	25.00	25.16	ug/L	1	20	0.0500	u
Tetrachloroethene	0.3329	0.3097	25.00	23.26	ug/L	-7	20	0.0500	u
Dibromochloromethane	0.3027	0.2941	25.00	24.29	ug/L	-3	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2945	25.00	24.15	ug/L	-3	20	0.0500	u
Chlorobenzene	1.0519	1.0489	25.00	24.93	ug/L	0	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3276	25.00	24.39	ug/L	-2	20	0.0500	u
Ethylbenzene	1.8115	1.8261	25.00	25.20	ug/L	1	20	0.0500	u
m,p-Xylenes	0.6304	0.6442	50.00	51.09	ug/L	2	20	0.0500	u
o-Xylene	0.6283	0.6187	25.00	24.62	ug/L	-2	20	0.0500	u
Styrene	1.0367	1.0527	25.00	25.39	ug/L	2	20	0.0500	u
Bromoform	0.1849	0.1865	25.00	21.91	ug/L	-12	20	0.1000	u
Isopropylbenzene	3.8595	3.6004	25.00	23.32	ug/L	-7	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9466	25.00	24.69	ug/L	-1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0715	25.00	26.17	ug/L	5	20	0.0500	u
Propylbenzene	3.9448	3.9361	25.00	24.95	ug/L	0	20	0.0500	u
Bromobenzene	1.0220	1.0624	25.00	25.99	ug/L	4	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.9010	25.00	26.45	ug/L	6	20	0.0500	u
2-Chlorotoluene	3.1099	3.3525	25.00	26.95	ug/L	8	20	0.0500	u
4-Chlorotoluene	2.6572	2.7381	25.00	25.76	ug/L	3	20	0.0500	u
tert-Butylbenzene	2.1712	1.9640	25.00	22.61	ug/L	-10	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.8526	25.00	27.03	ug/L	8	20	0.0500	u
sec-Butylbenzene	3.1284	2.7496	25.00	21.97	ug/L	-12	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.2447	25.00	22.50	ug/L	-10	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6809	25.00	24.86	ug/L	-1	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6123	25.00	24.37	ug/L	-3	20	0.0500	u
n-Butylbenzene	2.4331	2.3850	25.00	29.42	ug/L	18	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.6020	25.00	24.85	ug/L	-1	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1671	25.00	23.75	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	0.9987	25.00	22.95	ug/L	-8	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3422	25.00	19.56	ug/L	**-22**	20	0.0500	c- u ***
Naphthalene	2.7279	2.7934	25.00	25.60	ug/L	2	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9699	25.00	24.06	ug/L	-4	20	0.0500	u
Dibromofluoromethane	0.4472	0.4651	50.00	52.00	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3291	50.00	44.03	ug/L	-12	20	0.0500	u
Toluene-d8	1.4811	1.5465	50.00	52.21	ug/L	4	20	0.0500	u
Bromofluorobenzene	1.2424	1.2938	50.00	52.07	ug/L	4	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2226782	47.93	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3889840	58.97	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3378959	58.18	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1256121	27.72	17.10	17.10	0.00

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/25/09

-=low bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839382075

Date : 09/22/09 Reference : kif12
Sequence : MSVOA11 kim Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
010	CCV/LCS	QC513025	1771090	10.81	3063159	11.74	2626334	14.82	1004184	17.10
012	BLANK	QC513026	1677689	10.81	2938196	11.74	2420292	14.82	683430	17.10
013	MSS	214805-007	1627599	10.81	2892984	11.74	2404486	14.82	690720	17.10
014	SAMPLE	214805-009	1565529	10.81	2757761	11.74	2302025	14.82	604953	17.10
015	SAMPLE	214804-009	1505672	10.81	2669448	11.74	2197601	14.82	618082	17.10
016	SAMPLE	214804-011	1472585	10.81	2635877	11.74	2197171	14.82	646353	17.10
017	MS	QC513027	1510323	10.81	2678148	11.74	2313548	14.82	929714	17.10
018	MSD	QC513028	1575123	10.81	2772606	11.74	2395237	14.82	921218	17.10
020	SAMPLE	214846-004	1562873	10.81	2775408	11.74	2321901	14.82	639407	17.10
021	SAMPLE	214846-011	1507399	10.81	2695223	11.74	2258483	14.82	634750	17.10
022	SAMPLE	214846-001	1500905	10.81	2683520	11.74	2225923	14.82	602925	17.10
023	SAMPLE	214846-002	1479800	10.81	2643433	11.74	2219182	14.82	643099	17.10
024	SAMPLE	214850-001	1460536	10.81	2646196	11.74	2223363	14.82	624455	17.10
025	SAMPLE	214850-002	1443304	10.81	2599314	11.74	2166147	14.82	617441	17.10
026	SAMPLE	214850-003	1431257	10.81	2579824	11.74	2159311	14.82	628643	17.10
027	SAMPLE	214850-004	1390945	10.82	2516509	11.74	2125898	14.82	623666	17.10
028	SAMPLE	214850-005	1370408	10.81	2496229	11.74	2075026	14.82	571800	17.10
029	SAMPLE	214850-007	1364380	10.81	2450761	11.74	2057537	14.82	614715	17.10
030	SAMPLE	214850-008	1349570	10.81	2433732	11.74	2056869	14.82	584289	17.10
031	SAMPLE	214850-009	1286875	10.81	2337019	11.74	1964124	14.82	556855	17.10
032	SAMPLE	214850-010	1308540	10.81	2376141	11.74	2004063	14.82	588911	17.10
033	SAMPLE	214850-011	1292398	10.82	2344962	11.74	1986998	14.82	557910	17.10
034	SAMPLE	214850-012	1301082	10.81	2360769	11.74	2003780	14.82	583821	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839383527

Date : 09/23/09 Reference : kif12
Sequence : MSVOA11 kin Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
003	CCV/LCS	QC513189	2226782	10.81	3889840	11.74	3378959	14.82	1256121	17.10
005	BLANK	QC513190	2132577	10.81	3778450	11.74	3210002	14.82	953584	17.10
006	MSS	214850-006	2002692	10.81	3617354	11.74	3043560	14.82	856947	17.10
007	SAMPLE	214850-013	2031995	10.81	3616708	11.74	3071354	14.82	956131	17.10
008	SAMPLE	214850-014	1982900	10.81	3568909	11.74	3021933	14.82	840732	17.10
009	SAMPLE	214850-016	1925499	10.81	3473464	11.74	2931260	14.82	804988	17.10
010	SAMPLE	214850-017	1897165	10.81	3442359	11.74	2914080	14.82	861525	17.10
011	SAMPLE	214850-018	1829232	10.81	3321478	11.74	2829066	14.82	825762	17.10
012	SAMPLE	214851-001	1826085	10.81	3315230	11.74	2827611	14.82	839255	17.10
013	SAMPLE	214851-002	1812509	10.81	3311862	11.74	2815286	14.82	812711	17.10
014	SAMPLE	214851-004	1846525	10.81	3369335	11.74	2861907	14.82	860941	17.10
015	SAMPLE	214851-005	1830103	10.81	3337970	11.74	2837522	14.82	814173	17.10
016	SAMPLE	214851-006	1817949	10.81	3323325	11.74	2831016	14.82	804122	17.10
017	SAMPLE	214851-008	1829936	10.81	3335957	11.74	2859424	14.82	836601	17.10
018	SAMPLE	214851-010	1805756	10.81	3299160	11.74	2838816	14.82	852177	17.10
019	SAMPLE	214851-011	1789776	10.81	3253160	11.74	2805719	14.82	816490	17.10
020	SAMPLE	214851-012	1828398	10.81	3342060	11.74	2846250	14.82	818238	17.10
021	SAMPLE	214851-013	1773555	10.81	3259957	11.74	2796479	14.82	795558	17.10
022	SAMPLE	214850-012	1773646	10.81	3234345	11.74	2798061	14.82	767817	17.10
023	SAMPLE	214850-015	1758554	10.81	3229585	11.74	2752065	14.82	734633	17.10
024	SAMPLE	214851-003	1724896	10.82	3166102	11.74	2717615	14.82	780445	17.10
025	SAMPLE	214851-007	1756529	10.81	3206365	11.74	2741897	14.82	745360	17.10
026	MS	QC513213	1799711	10.81	3261225	11.74	2920030	14.82	1079276	17.10
027	MSD	QC513214	1936250	10.81	3504767	11.74	3141293	14.82	1145287	17.10
031	SAMPLE	215108-004	1800948	10.81	3312508	11.74	2846010	14.82	803866	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839382075

Instrument : MSVOA11 Begun : 09/22/09 07:55
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kim01	X	IB			09/22/09 07:55	1.0	1
002	kim02	X	BFB			09/22/09 08:22	1.0	2
003	kim03	X	QC513025	Water	155153	09/22/09 08:36	1.0	3 4 5 6 1
004	kim04	X	BFB			09/22/09 09:14	1.0	2
005	kim05	X	BFB			09/22/09 09:25	1.0	2
006	kim06	X	25PPB			09/22/09 09:38	1.0	7 8 9 10 1
007	kim07	X	QC513025	Water	155153	09/22/09 10:15	1.0	3 4 5 6 1
008	kim08	X	IB			09/22/09 10:43	1.0	1
009	kim09	TUN	BFB			09/22/09 11:11	1.0	2
010	kim10	CCV/LCS	QC513025	Water	155153	09/22/09 11:24	1.0	11 4 5 6 1
011	kim11	X	IB			09/22/09 11:53	1.0	1
012	kim12	BLANK	QC513026	Water	155153	09/22/09 12:21	1.0	1
013	kim13	MSS	214805-007	Water	155153	09/22/09 12:49	1.0	1
014	kim14	SAMPLE	214805-009	Water	155153	09/22/09 13:18	1.0	1
015	kim15	SAMPLE	214804-009	Water	155153	09/22/09 13:46	1.0	1
016	kim16	SAMPLE	214804-011	Water	155153	09/22/09 14:14	1.0	1
017	kim17	MS	QC513027	Water	155153	09/22/09 14:43	1.0	1 11 4 5 6
018	kim18	MSD	QC513028	Water	155153	09/22/09 15:11	1.0	1 11 4 5 6
019	kim19	X	IB			09/22/09 15:39	1.0	1
020	kim20	SAMPLE	214846-004	Water	155153	09/22/09 16:08	1.0	1
021	kim21	SAMPLE	214846-011	Water	155153	09/22/09 16:36	1.0	1
022	kim22	SAMPLE	214846-001	Water	155153	09/22/09 17:04	1.0	1
023	kim23	SAMPLE	214846-002	Water	155153	09/22/09 17:32	1.0	1
024	kim24	SAMPLE	214850-001	Water	155153	09/22/09 18:01	1.0	1
025	kim25	SAMPLE	214850-002	Water	155153	09/22/09 18:29	1.0	1
026	kim26	SAMPLE	214850-003	Water	155153	09/22/09 18:57	1.0	1
027	kim27	SAMPLE	214850-004	Water	155153	09/22/09 19:26	1.0	1
028	kim28	SAMPLE	214850-005	Water	155153	09/22/09 19:54	1.0	1
029	kim29	SAMPLE	214850-007	Water	155153	09/22/09 20:22	1.0	1
030	kim30	SAMPLE	214850-008	Water	155153	09/22/09 20:50	1.0	1
031	kim31	SAMPLE	214850-009	Water	155153	09/22/09 21:19	1.0	1
032	kim32	SAMPLE	214850-010	Water	155153	09/22/09 21:47	1.0	1
033	kim33	SAMPLE	214850-011	Water	155153	09/22/09 22:15	1.0	1
034	kim34	SAMPLE	214850-012	Water	155153	09/22/09 22:44	2.0	1
035	kim35	X	IB			09/22/09 23:12	1.0	1
036	kim36	X	IB			09/22/09 23:40	1.0	1
037	kim37	X	IB			09/23/09 00:08	1.0	1
038	kim38	X	IB			09/23/09 00:37	1.0	1
039	kim39	X	IB			09/23/09 01:05	1.0	1

BO 09/22/09 : KIM10, used new alliquot of standard

BO 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/23/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923 7=S12733 8=S12773 9=S12217 10=S12634 11=S12996

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839383527

Instrument : MSVOA11 Begun : 09/23/09 08:07
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kin01	X	IB			09/23/09 08:07	1.0	1
002	kin02	TUN	BFB			09/23/09 08:31	1.0	2
003	kin03	CCV/LCS	QC513189	Water	155193	09/23/09 08:44	1.0	3 4 5 6 1
004	kin04	X	IB			09/23/09 09:20	1.0	1
005	kin05	BLANK	QC513190	Water	155193	09/23/09 09:49	1.0	1
006	kin06	MSS	214850-006	Water	155193	09/23/09 10:17	1.0	1
007	kin07	SAMPLE	214850-013	Water	155193	09/23/09 10:45	1.0	1
008	kin08	SAMPLE	214850-014	Water	155193	09/23/09 11:14	1.0	1
009	kin09	SAMPLE	214850-016	Water	155193	09/23/09 11:42	1.0	1
010	kin10	SAMPLE	214850-017	Water	155193	09/23/09 12:10	1.0	1
011	kin11	SAMPLE	214850-018	Water	155193	09/23/09 12:39	1.0	1
012	kin12	SAMPLE	214851-001	Water	155193	09/23/09 13:07	1.0	1
013	kin13	SAMPLE	214851-002	Water	155193	09/23/09 13:35	1.0	1
014	kin14	SAMPLE	214851-004	Water	155193	09/23/09 14:04	1.0	1
015	kin15	SAMPLE	214851-005	Water	155193	09/23/09 14:32	1.0	1
016	kin16	SAMPLE	214851-006	Water	155193	09/23/09 15:00	1.0	1
017	kin17	SAMPLE	214851-008	Water	155193	09/23/09 15:28	1.0	1
018	kin18	SAMPLE	214851-010	Water	155193	09/23/09 15:57	1.0	1
019	kin19	SAMPLE	214851-011	Water	155193	09/23/09 16:25	1.0	1
020	kin20	SAMPLE	214851-012	Water	155193	09/23/09 16:53	1.0	1
021	kin21	SAMPLE	214851-013	Water	155193	09/23/09 17:22	1.0	1
022	kin22	SAMPLE	214850-012	Water	155193	09/23/09 17:50	1.0	1
023	kin23	SAMPLE	214850-015	Water	155193	09/23/09 18:18	2.0	1
024	kin24	SAMPLE	214851-003	Water	155193	09/23/09 18:47	2.0	1
025	kin25	SAMPLE	214851-007	Water	155193	09/23/09 19:15	5.0	1
026	kin26	MS	QC513213	Water	155193	09/23/09 19:43	1.0	1 3 4 5 6
027	kin27	MSD	QC513214	Water	155193	09/23/09 20:11	1.0	1 3 4 5 6
028	kin28	X	IB			09/23/09 20:40	1.0	1
029	kin29	X	IB			09/23/09 21:08	1.0	1
030	kin30	X	IB			09/23/09 21:36	1.0	1
031	kin31	SAMPLE	215108-004	Water	155198	09/23/09 22:04	1.0	1
032	kin32	X	IB			09/23/09 22:33	1.0	1

BO 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/24/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923

Page 1 of 1

GC/MS VOLATILE ORGANICS

Batch #: 155153

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214846-4	B	<2		1		11	mm 1x, 5mm ↑	
2	-11	C						mm 1x, 1+C Co	
3	-1	A						TB	
4	-2							1x	
5	214850-1	A	<2		3				
6	-2								
7	-3								
8	-4								
9	-5								
10	-6							MSS PUT OFF	
11	-6							MS/MSD	
12	-7	A	<2						
13	-8								
14	-9								
15	-10								
16	-11								
17	-12					3		2x ~~PUT OFF~~	
18	-13							1x PUT OFF	
19	-14							1x	
20	-15							2x	
21	-16							1x PUT OFF	
22	214805-9	A	<2					mm 1x, 12DCA ↑, hold 9/22	
23	214804-9	A						mm 1x, 12DCA↑, hold 9/22	
24	214805-7	A						MSS 1x	
25	214805-7	BHI						MS/MSD 1x	
26	214804-11	A						mm 1x, 12DCA↑ hold 9/22	
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155193

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214850-12	B	<2				11	MM 1x, OP, TCE 75	
2	-6	A						1x MSS	
3	-6	BCD	<2					1x MS/MSD	
4	-13	A						1x	
5	-14								
6	-15		<2			3		2x	
7	-16							1x	
8	-17								
9	-18								
10	214851-1	A						1x	
11	-2							1x	
12	-3		<2			4		2x	
13	-4							1x	
14	-5								
15	-6								
16	-7		<2			5		5x	
17	-8							1x	
18	-10								
19	-11								
20	-12								
21	-13								
22									
23									
24									
25									
26	215108-4	A	<2				11	Storage Blk	
27									
28									
29									
30									
31									
32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214851
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091109B	214851-001
BC-8C-9C1	214851-002
BC-8B-9C1	214851-003
BC-8A-9C1	214851-004
ASE-97A-9C1	214851-005
ASE-84A-9C1	214851-006
PL-513-9C1	214851-007
ASE-84C-9C1	214851-008
ASE-99A-9C1	214851-009
ASE-110A-9C1	214851-010
ASE-123A-9C1	214851-011
ASE-109A-9C1	214851-012
ASE-101A-9C1	214851-013
ASE-100A-9C1	214851-014
ASE-103A-9C1	214851-015
ASE-129A-9C1	214851-016
PL-507-9C1	214851-017

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/28/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214851**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/14/09**
Samples Received:	**09/12/09**

This data package contains sample and QC results for seventeen water samples, requested for the above referenced project on 09/14/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low responses were observed for hexachlorobutadiene, 2-hexanone, and 4-methyl-2-pentanone in the CCV analyzed 09/23/09 08:44; these analytes met minimum response criteria, and affected data was qualified with "b".

Low responses were observed for 2-hexanone and iodomethane in the CCV analyzed 09/24/09 08:35; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for carbon disulfide; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for n-butylbenzene and trans-1,2-dichloroethene in the MS/MSD of BC-3-9C1 (lab # 214850-006); the LCS was within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

High recovery was observed for n-butylbenzene in the LCS for batch 155248; this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene, 1,1-dichloroethane, and trans-1,2-dichloroethene in the MS/MSD of ASE-99A-9C1 (lab # 214851-009); the associated RPDs were within limits.

High surrogate recovery was observed for bromofluorobenzene in ASE-97A-9C1 (lab # 214851-005); no associated target analytes were detected in the sample.

No other analytical problems were encountered.

Chain of Custody

21481

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Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. ~~Weise~~ Wiese - D. Foehr - M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	TB	--	--	TB-091109B	9/11/9	0005				1	--	--	X														
2	BC-8C	--	163	BC-8C-9C1	9/11/9	0044				3	G	N	X														
3	BC-8B	--	94	BC-8B-9C1	9/11/9	0116				4	G	N	X	X													
4	BC-8A	--	110	BC-8A-9C1	9/11/9	0155				3	G	N	X														
5	ASE-97A	--	109	ASE-97A-9C1	9/11/9	0228				4	G	N	X	X													
6	ASE-84A	--	106	ASE-84A-9C1	9/11/9	0305				3	G	N	X														
7	PL-513	--	--	PL-513-9C1	9/11/9	0315				3	G	N	X														
8	ASE-84C	--	163	ASE-84C-9C1	9/11/9	0350				3	G	N	X														
9	ASE-99A	--	123	ASE-99A-9C1	9/11/9	0504				12	G	N	X	X											X		
10	ASE-110A	--	123	ASE-110A-9C1	9/11/9	0554				4	G	N	X	X													
11	ASE-123A	--	108	ASE-123A-9C1	9/11/9	0716				4	G	N	X	X													
12	ASE-109A	--	123	ASE-109A-9C1	9/11/9	0758				4	G	N	X	X													

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	H+A		FED Ex		
	Date/Time 09/11/09 15:00		Date/Time 09/11/09 15:00	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214851

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Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 40060.70532
COC#: 37380

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Lab Proj # (SDG):
Lab ID: CTBERK
Site ID: SKYHARBOR
Lab Job #:
Authorized User: Honeywell

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: M. ~~Weise~~ Wiese - D. Foehr - M. Hall
PO # 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Full Report TAT: 14
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Order

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)	MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units															
13 1	ASE-101A	--	125	ASE-101A-9C1	9/11/9	0925				4	G	N	X	X												
14 2	ASE-100A	--	123	ASE-100A-9C1	9/11/9	1005				4	G	N	X	X												
15 3	ASE-103A	--	123	ASE-103A-9C1	9/11/9	1044				4	G	N	X	X												
16 4	ASE-129A	--	108	ASE-129A-9C1	9/11/9	1116				4	G	N	X	X												
17 5	PL-507	--	--	PL-507-9C1	9/11/9	1125			ERB	4	G	N	X	X												
6																										
7																										
8																										
9																										
10																										
11																										
12																										

Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214850/214851 Date Received 9/12/09 Number of coolers 2
Client CH2M Hill Project Sky Harbor

Date Opened 9/12/09 By (print) Ricky Grams (sign) [signature]
Date Logged in 9-14 By (print) J-Grayette (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) (YES) NO
   Shipping info Fed Ex 842193543071
2A. Were custody seals present? ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 each Name Signature Date 9/11/09
2B. Were custody seals intact upon arrival? (YES) NO N/A
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.5 / 2.5

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are samples in the appropriate containers for indicated tests? (YES) NO
11. Are sample labels present, in good condition and complete? (YES) NO
12. Do the sample labels agree with custody papers? (YES) NO
13. Was sufficient amount of sample sent for tests requested? (YES) NO
14. Are the samples appropriately preserved? (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
16. Was the client contacted concerning this sample delivery? YES (NO)
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 214851

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/11/09
Units:	ug/L	Received:	09/12/09
Diln Fac:	1.000	Prepared:	09/18/09
Batch#:	155075		

Field ID:	BC-8B-9C1	Lab ID:	214851-003
Type:	SAMPLE	Analyzed:	09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	107	50-120

Field ID:	ASE-97A-9C1	Lab ID:	214851-005
Type:	SAMPLE	Analyzed:	09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	108	50-120

Field ID:	ASE-99A-9C1	Lab ID:	214851-009
Type:	SAMPLE	Analyzed:	09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	98	50-120

Field ID:	ASE-110A-9C1	Lab ID:	214851-010
Type:	SAMPLE	Analyzed:	09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	106	50-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/11/09
Units:	ug/L	Received:	09/12/09
Diln Fac:	1.000	Prepared:	09/18/09
Batch#:	155075		

Field ID: ASE-123A-9C1 Lab ID: 214851-011
Type: SAMPLE Analyzed: 09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	101	50-120

Field ID: ASE-109A-9C1 Lab ID: 214851-012
Type: SAMPLE Analyzed: 09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	107	50-120

Field ID: ASE-101A-9C1 Lab ID: 214851-013
Type: SAMPLE Analyzed: 09/23/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	106	50-120

Field ID: ASE-100A-9C1 Lab ID: 214851-014
Type: SAMPLE Analyzed: 09/25/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	114	50-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/11/09
Units:	ug/L	Received:	09/12/09
Diln Fac:	1.000	Prepared:	09/18/09
Batch#:	155075		

Field ID:	ASE-103A-9C1	Lab ID:	214851-015
Type:	SAMPLE	Analyzed:	09/25/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	108	50-120

Field ID:	ASE-129A-9C1	Lab ID:	214851-016
Type:	SAMPLE	Analyzed:	09/25/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	109	50-120

Field ID:	PL-507-9C1	Lab ID:	214851-017
Type:	SAMPLE	Analyzed:	09/25/09

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	119	50-120

Type:	BLANK	Analyzed:	09/23/09
Lab ID:	QC512696		

Analyte	Result	RL
Diesel C10-C22	ND	1,000
Motor Oil C22-C32	ND	1,000

Surrogate	%REC	Limits
o-Terphenyl	101	50-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512697	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C22	2,500	2,471	99	54-120

Surrogate	%REC	Limits
o-Terphenyl	99	50-120

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-99A-9C1	Batch#:	155075
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Prepared:	09/18/09
Diln Fac:	1.000	Analyzed:	09/23/09

Type: MS Lab ID: QC512698

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C22	<16.22	2,500	2,452	98	54-120

Surrogate	%REC	Limits
o-Terphenyl	98	50-120

Type: MSD Lab ID: QC512699

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C22	2,500	2,407	96	54-120	2	31

Surrogate	%REC	Limits
o-Terphenyl	96	50-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512700	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits
Motor Oil C22-C32	2,500	2,680	107	70-128

Surrogate	%REC	Limits
o-Terphenyl	98	50-120

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507002
Units : mg/L

Name : DSL_225
Date : 13-AUG-2009 21:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_012	229324507012	DSL_10	13-AUG-2009 21:35	S11869
L2	225_013	229324507013	DSL_100	13-AUG-2009 22:03	S11870
L3	225_014	229324507014	DSL_500	13-AUG-2009 22:31	S11871
L4	225_015	229324507015	DSL_1000	13-AUG-2009 22:58	S11872
L5	225_016	229324507016	DSL_5000	13-AUG-2009 23:26	S11868
L6	225_017	229324507017	DSL_7500	13-AUG-2009 23:54	S11873

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	46507	41830	44857	42384	42411	43420	AVRG		2.30E-5		43568	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	7	100.0	-4	500.0	3	1000	-3	5000	-3	7500	0

TFB 08/15/09 : Levels 1-5, ICV, and IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 229324507002

Name : DSL_225
Cal Date : 13-AUG-2009

ICV 229324507019 (225_019 14-AUG-2009) stds: S12546

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	483.5	mg/L	-3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507003
Units : mg/L

Name : MO_225
Date : 14-AUG-2009 02:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_022	229324507022	MO_50	14-AUG-2009 02:16	S12675
L2	225_023	229324507023	MO_250	14-AUG-2009 02:45	S12676
L3	225_024	229324507024	MO_500	14-AUG-2009 03:14	S12677
L4	225_025	229324507025	MO_1000	14-AUG-2009 03:43	S12678
L5	225_026	229324507026	MO_5000	14-AUG-2009 04:11	S12679

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	33336	31193	30777	30135	28013	AVRG		3.26E-5		30691	6	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C22-C32	B	50.00	9	250.0	2	500.0	0	1000	-2	5000	-9

TFB 08/15/09 : Levels 1-3,5, and IB: corrected automatically drawn baseline.

TFB 08/15/09 : Level 6 was dropped due to high %RSD.

TFB 08/15/09 : This instrument will not be used to analyze MO ranges C28-C36 and C28-C40 due to out of range %D.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507001
Units : mg/L

Name : HexOTP_225
Date : 14-AUG-2009 05:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_029	229324507029	HEX OTP_5	14-AUG-2009 05:37	S12539
L2	225_030	229324507030	HEX OTP_10	14-AUG-2009 06:06	S12540
L3	225_031	229324507031	HEX OTP_25	14-AUG-2009 06:34	S12541
L4	225_032	229324507032	HEX OTP_50	14-AUG-2009 07:03	S12542
L5	225_033	229324507033	HEX OTP_100	14-AUG-2009 07:31	S12543
L6	225_034	229324507034	HEX OTP_200	14-AUG-2009 08:00	S12544

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	50142	49537	49526	49425	50986	52699	AVRG		1.98E-5		50386	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	B	5.000	0	10.00	-2	25.00	-2	50.00	-2	100.0	1	200.0	5

TFB 08/15/09 : IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214851 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214851 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 229380981063 File : 264_063 Time : 22-SEP-2009 20:53
Standards: S12545

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	41458	250.0	237.9	mg/L	-5	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	48493	50.00	48.12	mg/L	-4	15	

JDG 09/24/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229380981064 File : 264_064 Time : 22-SEP-2009 21:23
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	32896	500.0	535.9	mg/L	7	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	54010	50.00	53.60	mg/L	7	15	

JDG 09/24/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 229380981075 File : 264_075 Time : 23-SEP-2009 03:19
Standards: S12546

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	42666	500.0	489.6	mg/L	-2	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	50344	50.00	49.96	mg/L	0	15	

JDG 09/24/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229380981076 File : 264_076 Time : 23-SEP-2009 03:50
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	31894	500.0	519.6	mg/L	4	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	53427	50.00	53.02	mg/L	6	15	

Analyst: JDG Date: 09/24/09 Reviewer: EAH Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 229380981084 File : 264_084 Time : 23-SEP-2009 07:57
Standards: S12547

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	42311	1000	971.1	mg/L	-3	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	51367	50.00	50.97	mg/L	2	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229380981085 File : 264_085 Time : 23-SEP-2009 08:27
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	32147	500.0	523.7	mg/L	5	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	54345	50.00	53.93	mg/L	8	15	

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626079 File : 264b079 Time : 22-SEP-2009 21:29
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42883	500.0	498.3	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67438	50.00	47.57	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169380626080 File : 264b080 Time : 22-SEP-2009 21:57
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57446	500.0	500.8	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	63359	50.00	44.70	mg/L	-11	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626096 File : 264b096 Time : 23-SEP-2009 05:25
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43307	500.0	503.2	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67479	50.00	47.60	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169380626097 File : 264b097 Time : 23-SEP-2009 05:53
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56996	250.0	248.4	mg/L	-1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	58264	50.00	41.10	mg/L	**-18**	15	c-

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
Seqnum : 869385421034 File : 267a034 Time : 25-SEP-2009 09:32
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26767	250.0	276.8	mg/L	11	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28036	50.00	49.91	mg/L	0	15	

TFB 09/25/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869385421035 File : 267a035 Time : 25-SEP-2009 10:00
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18264	500.0	504.1	mg/L	1	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	30423	50.00	54.16	mg/L	8	15	

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869385421042 File : 267a042 Time : 25-SEP-2009 13:18
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	25997	1000	1075	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29956	50.00	53.32	mg/L	7	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869385421043 File : 267a043 Time : 25-SEP-2009 13:46
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18815	500.0	519.3	mg/L	4	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	30699	50.00	54.65	mg/L	9	15	

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264b001	X	PRIMER				09/21/09 07:46	1.0		
002	264b002	X	IB				09/21/09 08:14	1.0		
003	264b003	X	C8-C50				09/21/09 08:42	1.0	1	
004	264b004	X	DSL_250				09/21/09 09:10	1.0	2	
005	264b005	X	MO_500				09/21/09 09:38	1.0	3	
006	264b006	X	DSL_250				09/21/09 11:34	1.0	2	
007	264b007	X	BUNK_500				09/21/09 12:02	1.0	4	
008	264b008	X	MO_500				09/21/09 12:31	1.0	3	
009	264b009	X	IB				09/21/09 13:57	1.0		
010	264b010	CMARKER	CMARKER				09/21/09 14:25	1.0	1	
011	264b011	CCV	MO_500				09/21/09 14:53	1.0	3	
012	264b012	CCV	DSL_250				09/21/09 15:21	1.0	2	
013	264b013	CCV	BUNK_500				09/21/09 16:17	1.0	4	
014	264b014	BLANK	QC512806	S	Soil	155101	09/21/09 17:05	1.0		
015	264b015	LCS	QC512812	S	Soil	155101	09/21/09 17:33	1.0		
016	264b016	MSS	214977-001	S	Soil	155101	09/21/09 18:01	1.0		
017	264b017	MS	QC512808	S	Soil	155101	09/21/09 18:29	1.0		
018	264b018	MSD	QC512809	S	Soil	155101	09/21/09 18:57	1.0		
019	264b019	MSS	214978-001	S	Soil	155101	09/21/09 19:24	1.0		
020	264b020	MS	QC512810	S	Soil	155101	09/21/09 19:52	1.0		
021	264b021	MSD	QC512811	S	Soil	155101	09/21/09 20:20	1.0		
022	264b022	SAMPLE	214977-003	S	Soil	155101	09/21/09 20:48	5.0		
023	264b023	X	IB				09/21/09 21:16	1.0		
024	264b024	SAMPLE	214977-002	S	Soil	155101	09/21/09 21:44	1.0		
025	264b025	CCV	MO_500				09/21/09 22:11	1.0	3	
026	264b026	CCV	DSL_500				09/21/09 22:39	1.0	5	
027	264b027	CCV	BUNK_500				09/21/09 23:07	1.0	4	
028	264b028	X	CCV				09/21/09 23:35	1.0	3	
029	264b029	X	CCV				09/22/09 00:03	1.0	5	
030	264b030	X	CCV				09/22/09 00:31	1.0	4	
031	264b031	SAMPLE	214977-004	S	Soil	155101	09/22/09 00:58	1.0		
032	264b032	SAMPLE	214977-005	S	Soil	155101	09/22/09 01:26	5.0		
033	264b033	SAMPLE	214977-006	S	Soil	155101	09/22/09 01:54	1.0		
034	264b034	SAMPLE	214977-007	S	Soil	155101	09/22/09 02:22	5.0		
035	264b035	SAMPLE	214977-008	S	Soil	155101	09/22/09 02:49	1.0		
036	264b036	SAMPLE	214978-003	S	Soil	155101	09/22/09 03:17	1.0		
045	264b045	X	CCV				09/22/09 03:47	1.0	3	
046	264b046	X	CCV				09/22/09 04:15	1.0	6	
047	264b047	X	CCV				09/22/09 04:43	1.0	4	
048	264b048	SAMPLE	214978-006	S	Soil	155101	09/22/09 05:11	1.0		
049	264b049	SAMPLE	214978-007	S	Soil	155101	09/22/09 05:39	1.0		
050	264b050	CCV	MO_500				09/22/09 06:07	1.0	3	
051	264b051	CCV	DSL_250				09/22/09 06:35	1.0	2	
052	264b052	CCV	BUNK_500				09/22/09 07:02	1.0	4	
053	264b053	SAMPLE	214978-002	S	Soil	155101	09/22/09 08:01	1.0		
054	264b054	SAMPLE	214978-005	S	Soil	155101	09/22/09 08:29	1.0		
055	264b055	SAMPLE	214978-004	S	Soil	155101	09/22/09 08:56	1.0		
056	264b056	SAMPLE	214978-008	S	Soil	155101	09/22/09 09:24	1.0		
057	264b057	X	IB				09/22/09 10:20	1.0		
058	264b058	SAMPLE	214988-001		Water	155106	09/22/09 10:48	1.0		1:BUNKC:12-40=7000
059	264b059	SAMPLE	214988-002		Water	155106	09/22/09 11:15	1.0		1:BUNKC:12-40=7000
060	264b060	SAMPLE	214990-001		Soil	155134	09/22/09 12:24	3.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B Begun : 09/21/09 07:46
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
061	264b061	SAMPLE	214990-004		Soil	155134	09/22/09 12:57	3.0		
062	264b062	SAMPLE	214990-003		Soil	155134	09/22/09 13:26	3.0		
063	264b063	SAMPLE	214990-005		Soil	155134	09/22/09 13:53	3.0		
064	264b064	CCV	MO_500				09/22/09 14:21	1.0	3	
065	264b065	CCV	DSL_1000				09/22/09 14:49	1.0	6	
066	264b066	CCV	BUNK_500				09/22/09 15:17	1.0	4	
067	264b067	CMARKER	CMARKER				09/22/09 15:45	1.0	1	
068	264b068	MS	QC512808	S	Soil	155101	09/22/09 16:22	1.0		
069	264b069	MSD	QC512809	S	Soil	155101	09/22/09 16:50	1.0		
070	264b070	SAMPLE	215017-005		Water	155106	09/22/09 17:18	2.0		
071	264b071	MSS	214910-001		Soil	155134	09/22/09 17:46	1.0		
072	264b072	SAMPLE	214910-003		Soil	155134	09/22/09 18:14	1.0		
073	264b073	X	IB				09/22/09 18:42	1.0		
074	264b074	SAMPLE	215004-001	S	Water	155106	09/22/09 19:10	1.0		
075	264b075	SAMPLE	214959-010	S	Water	155106	09/22/09 19:38	1.0		
076	264b076	SAMPLE	214910-002		Soil	155134	09/22/09 20:06	1.0		
077	264b077	SAMPLE	214959-005	S	Water	155074	09/22/09 20:34	1.0		
078	264b078	SAMPLE	214959-006	S	Water	155074	09/22/09 21:01	1.0		
079	264b079	CCV	MO_500				09/22/09 21:29	1.0	3	
080	264b080	CCV	DSL_500				09/22/09 21:57	1.0	5	
081	264b081	CCV	BUNK_500				09/22/09 22:25	1.0	4	
082	264b082	X	CCV				09/22/09 22:53	1.0	3	
083	264b083	X	CCV				09/22/09 23:21	1.0	5	
084	264b084	X	CCV				09/22/09 23:50	1.0	4	
085	264b085	SAMPLE	214959-007	S	Water	155074	09/23/09 00:18	1.0		
086	264b086	SAMPLE	214959-008	S	Water	155074	09/23/09 00:46	1.0		
087	264b087	SAMPLE	214959-009	S	Water	155074	09/23/09 01:13	1.0		
088	264b088	BLANK	QC512696		Water	155075	09/23/09 01:41	1.0		
089	264b089	LCS	QC512697		Water	155075	09/23/09 02:09	1.0		
090	264b090	LCS	QC512700		Water	155075	09/23/09 02:37	1.0		
091	264b091	MSS	214851-009		Water	155075	09/23/09 03:05	1.0		
092	264b092	MS	QC512698		Water	155075	09/23/09 03:33	1.0		
093	264b093	MSD	QC512699		Water	155075	09/23/09 04:01	1.0		
094	264b094	SAMPLE	214903-001	S	Water	154973	09/23/09 04:29	1.0		
095	264b095	X	CMARKER				09/23/09 04:57	1.0	1	
096	264b096	CCV	MO_500				09/23/09 05:25	1.0	3	
097	264b097	CCV	DSL_250				09/23/09 05:53	1.0	2	
098	264b098	X	CCV				09/23/09 06:21	1.0	3	
099	264b099	X	CCV				09/23/09 06:49	1.0	2	
100	264b100	X	X			155220	09/24/09 11:01	10.0		

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 52.

JDG 09/22/09 : 37- 44 did not run.

TFB 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 53 through 66.

JDG 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 67 through 99.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

Standards used: 1=S11248 2=S12545 3=S12822 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229324507

Instrument : GC14B Begun : 08/13/09 08:27
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	225_001	X	IB			08/13/09 08:27	1.0		
002	225_002	X	CMARKER			08/13/09 08:54	1.0	1	
003	225_003	X	CCV			08/13/09 09:23	1.0	2	
004	225_004	X	CCV			08/13/09 09:51	1.0	3	
005	225_005	X	IB			08/13/09 17:46	1.0		
006	225_006	X	IB			08/13/09 17:55	1.0		
007	225_007	X	IB			08/13/09 18:44	1.0		
008	225_008	X	IB			08/13/09 20:01	1.0		
009	225_009	X	IB			08/13/09 20:09	1.0		
010	225_010	X	IB			08/13/09 20:39	1.0		
011	225_011	IB	CALIB			08/13/09 21:07	1.0		
012	225_012	ICAL	DSL_10			08/13/09 21:35	1.0	4	
013	225_013	ICAL	DSL_100			08/13/09 22:03	1.0	5	
014	225_014	ICAL	DSL_500			08/13/09 22:31	1.0	6	
015	225_015	ICAL	DSL_1000			08/13/09 22:58	1.0	7	
016	225_016	ICAL	DSL_5000			08/13/09 23:26	1.0	8	
017	225_017	ICAL	DSL_7500			08/13/09 23:54	1.0	9	
018	225_018	IB	CALIB			08/14/09 00:22	1.0		
019	225_019	ICV	DSL_500			08/14/09 00:51	1.0	2	
020	225_020	X	ICV			08/14/09 01:19	1.0	2	
021	225_021	IB	CALIB			08/14/09 01:48	1.0		
022	225_022	ICAL	MO_50			08/14/09 02:16	1.0	10	
023	225_023	ICAL	MO_250			08/14/09 02:45	1.0	11	
024	225_024	ICAL	MO_500			08/14/09 03:14	1.0	12	
025	225_025	ICAL	MO_1000			08/14/09 03:43	1.0	13	
026	225_026	ICAL	MO_5000			08/14/09 04:11	1.0	14	
027	225_027	ICAL	MO_7500			08/14/09 04:40	1.0	15	
028	225_028	IB	CALIB			08/14/09 05:09	1.0		
029	225_029	ICAL	HEX OTP_5			08/14/09 05:37	1.0	16	
030	225_030	ICAL	HEX OTP_10			08/14/09 06:06	1.0	17	
031	225_031	ICAL	HEX OTP_25			08/14/09 06:34	1.0	18	
032	225_032	ICAL	HEX OTP_50			08/14/09 07:03	1.0	19	
033	225_033	ICAL	HEX OTP_100			08/14/09 07:31	1.0	20	
034	225_034	ICAL	HEX OTP_200			08/14/09 08:00	1.0	21	
035	225_035	IB	CALIB			08/14/09 08:28	1.0		
036	225_036	ICAL	JP5_10			08/14/09 08:56	1.0	22	
037	225_037	ICAL	JP5_100			08/14/09 09:24	1.0	23	
038	225_038	ICAL	JP5_500			08/14/09 10:29	1.0	24	
039	225_039	ICAL	JP5_1500			08/14/09 10:56	1.0	25	
040	225_040	ICAL	JP5_2500			08/14/09 11:24	1.0	26	
041	225_041	ICAL	JP5_5000			08/14/09 11:52	1.0	27	
042	225_042	IB	CALIB			08/14/09 12:20	1.0		
043	225_043	ICAL	BUNK_50			08/14/09 12:48	1.0	28	
044	225_044	ICAL	BUNK_250			08/14/09 13:16	1.0	29	
045	225_045	X	BUNK_500			08/14/09 13:44	1.0	30	
046	225_046	ICAL	BUNK_1250			08/14/09 14:12	1.0	31	
047	225_047	ICAL	BUNK_2500			08/14/09 14:40	1.0	32	
048	225_048	ICAL	BUNK_5000			08/14/09 15:08	1.0	33	
049	225_049	IB	CALIB			08/14/09 15:36	1.0		
050	225_050	CMARKER	C8-C50			08/14/09 16:04	1.0	1	
051	225_051	IB	CALIB			08/14/09 16:32	1.0		
052	225_052	ICAL	BUNK_500			08/15/09 12:20	1.0	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229324507

Instrument : GC14B Begun : 08/13/09 08:27
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Standards used: 1=S11825 2=S12546 3=S12687 4=S11869 5=S11870 6=S11871 7=S11872 8=S11868 9=S11873 10=S12675 11=S12676 12=S12677 13=S12678 14=S12679 15=S12680 16=S12539 17=S12540 18=S12541 19=S12542 20=S12543 21=S12544 22=S11894 23=S11895 24=S11896 25=S11897 26=S11898 27=S11893 28=S12707 29=S12708 30=S12709 31=S12710 32=S12711 33=S12706

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229380981

Instrument : GC14B Begun : 09/21/09 13:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
003	264_003	X	IB				09/21/09 13:41	1.0		
004	264_004	CMARKER	CMARKER				09/21/09 14:19	1.0	1	
005	264_005	CCV	DSL_250				09/21/09 14:50	1.0	2	
006	264_006	CCV	MO_500				09/21/09 15:22	1.0	3	
007	264_007	SAMPLE	215000-001	S	Soil	155101	09/21/09 16:02	20.0		1:BUNKC:12-40=5400
008	264_008	SAMPLE	215000-002	S	Soil	155101	09/21/09 16:33	20.0		1:BUNKC:12-40=12000
009	264_009	X	IB				09/21/09 17:05	1.0		
010	264_010	MS	QC512303		Water	154973	09/21/09 17:36	1.0		
011	264_011	MSD	QC512304		Water	154973	09/21/09 18:07	1.0		
012	264_012	BLANK	QC512665		Soil	155065	09/21/09 18:37	1.0		
013	264_013	LCS	QC512666	S	Soil	155065	09/21/09 19:08	1.0		
014	264_014	MSS	214853-007	S	Soil	155065	09/21/09 19:39	1.0		6:BUNKC:12-40=28000
015	264_015	MS	QC512667	S	Soil	155065	09/21/09 20:10	1.0		3:BUNKC:12-40=24000
016	264_016	MSD	QC512668	S	Soil	155065	09/21/09 20:40	1.0		6:BUNKC:12-40=28000
017	264_017	SAMPLE	214713-002		Soil	155065	09/21/09 21:11	1.0		
018	264_018	CCV	DSL_1000				09/21/09 21:42	1.0	4	
019	264_019	CCV	MO_500				09/21/09 22:13	1.0	3	
020	264_020	X	CCV				09/21/09 22:44	1.0	4	
021	264_021	X	CCV				09/21/09 23:15	1.0	3	
022	264_022	SAMPLE	214860-001	S	Soil	155065	09/21/09 23:46	3.0		
023	264_023	SAMPLE	214853-001	S	Soil	155065	09/22/09 00:17	1.0		11:BUNKC:12-40=36000
024	264_024	SAMPLE	214853-002	S	Soil	155065	09/22/09 00:48	1.0		13:BUNKC:12-40=43000
025	264_025	SAMPLE	214853-003	S	Soil	155065	09/22/09 01:19	3.0		2:BUNKC:12-40=18000
026	264_026	SAMPLE	214853-004	S	Soil	155065	09/22/09 01:50	1.0		11:BUNKC:12-40=41000
027	264_027	SAMPLE	214713-010		Soil	155065	09/22/09 02:21	1.0		
028	264_028	SAMPLE	214713-012		Soil	155065	09/22/09 02:52	1.0		
029	264_029	X	IB				09/22/09 03:23	1.0		
030	264_030	SAMPLE	214713-004		Soil	155065	09/22/09 03:54	1.0		1:BUNKC:12-40=5800
031	264_031	SAMPLE	214713-006		Soil	155065	09/22/09 04:25	1.0		
032	264_032	SAMPLE	214713-008		Soil	155065	09/22/09 04:56	1.0		
033	264_033	X	CMARKER				09/22/09 05:27	1.0	1	
034	264_034	CCV	DSL_500				09/22/09 05:58	1.0	5	
035	264_035	X	MO_500				09/22/09 06:29	1.0	3	
036	264_036	X	CCV				09/22/09 06:59	1.0	2	
037	264_037	CCV	MO_500				09/22/09 07:30	1.0	3	
038	264_038	SAMPLE	214853-005	S	Soil	155065	09/22/09 08:00	1.0		13:BUNKC:12-40=46000
039	264_039	SAMPLE	214853-006	S	Soil	155065	09/22/09 08:30	1.0		12:BUNKC:12-40=43000
040	264_040	SAMPLE	214853-008	S	Soil	155065	09/22/09 09:01	1.0		13:BUNKC:12-40=45000
041	264_041	SAMPLE	214853-009	S	Soil	155065	09/22/09 09:32	1.0		4:BUNKC:12-40=25000
042	264_042	SAMPLE	214853-010	S	Soil	155065	09/22/09 10:02	1.0		3:BUNKC:12-40=23000
043	264_043	SAMPLE	214853-011	S	Soil	155065	09/22/09 10:33	1.0		6:BUNKC:12-40=26000
044	264_044	SAMPLE	214853-012	S	Soil	155065	09/22/09 11:04	1.0		3:BUNKC:12-40=24000
045	264_045	X	IB				09/22/09 11:35	1.0		
046	264_046	SAMPLE	214882-005	S	WET DI Leachate	155106	09/22/09 12:06	1.0		
047	264_047	MSS	214853-007	S	Soil	155065	09/22/09 12:37	3.0		1:BUNKC:12-40=9500
048	264_048	MSS	214990-007		Soil	155134	09/22/09 13:08	1.0		
049	264_049	CCV	DSL_1000				09/22/09 13:39	1.0	4	
050	264_050	CCV	MO_500				09/22/09 14:10	1.0	3	
051	264_051	SAMPLE	214853-001	S	Soil	155065	09/22/09 14:41	5.0		1:BUNKC:12-40=6800
052	264_052	SAMPLE	214853-002	S	Soil	155065	09/22/09 15:12	5.0		1:BUNKC:12-40=8000
053	264_053	SAMPLE	214853-004	S	Soil	155065	09/22/09 15:43	5.0		1:BUNKC:12-40=7500
054	264_054	SAMPLE	214853-005	S	Soil	155065	09/22/09 16:14	5.0		1:BUNKC:12-40=8800

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229380981

Instrument : GC14B Begun : 09/21/09 13:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
055	264_055	SAMPLE	214853-006	S	Soil	155065	09/22/09 16:45	5.0		1:BUNKC:12-40=8200
056	264_056	SAMPLE	214853-008	S	Soil	155065	09/22/09 17:16	5.0		1:BUNKC:12-40=8600
057	264_057	X	IB				09/22/09 17:48	1.0		
058	264_058	SAMPLE	214882-004	S	WET DI Leachate	155106	09/22/09 18:19	1.0		
059	264_059	SAMPLE	214803-006		Water	154973	09/22/09 18:50	1.0		
060	264_060	SAMPLE	214803-007		Water	154973	09/22/09 19:21	1.0		
061	264_061	SAMPLE	214803-008		Water	154973	09/22/09 19:52	1.0		
062	264_062	X	CMARKER				09/22/09 20:22	1.0	1	
063	264_063	CCV	DSL_250				09/22/09 20:53	1.0	2	
064	264_064	CCV	MO_500				09/22/09 21:23	1.0	3	
065	264_065	SAMPLE	214803-009		Water	154973	09/22/09 22:10	1.0		
066	264_066	SAMPLE	214803-010		Water	154973	09/22/09 22:41	1.0		
067	264_067	SAMPLE	214816-008		Soil	155134	09/22/09 23:12	1.0		
068	264_068	SAMPLE	214816-009		Soil	155134	09/22/09 23:42	1.0		
069	264_069	SAMPLE	214816-010		Soil	155134	09/23/09 00:13	1.0		
070	264_070	SAMPLE	214816-017		Soil	155134	09/23/09 00:44	1.0		
071	264_071	SAMPLE	214816-018		Soil	155134	09/23/09 01:15	1.0		
072	264_072	SAMPLE	214816-019		Soil	155134	09/23/09 01:46	1.0		
073	264_073	SAMPLE	214851-005		Water	155075	09/23/09 02:17	1.0		
074	264_074	SAMPLE	214851-010		Water	155075	09/23/09 02:48	1.0		
075	264_075	CCV	DSL_500				09/23/09 03:19	1.0	5	
076	264_076	CCV	MO_500				09/23/09 03:50	1.0	3	
077	264_077	X	CCV				09/23/09 04:21	1.0	5	
078	264_078	X	CCV				09/23/09 04:52	1.0	3	
079	264_079	SAMPLE	214851-011		Water	155075	09/23/09 05:24	1.0		
080	264_080	SAMPLE	214851-012		Water	155075	09/23/09 05:55	1.0		
081	264_081	SAMPLE	214851-013		Water	155075	09/23/09 06:26	1.0		
082	264_082	SAMPLE	214851-003		Water	155075	09/23/09 06:56	1.0		
083	264_083	X	CMARKER				09/23/09 07:26	1.0	1	
084	264_084	CCV	DSL_1000				09/23/09 07:57	1.0	4	
085	264_085	CCV	MO_500				09/23/09 08:27	1.0	3	
086	264_086	X	CCV				09/23/09 11:57	1.0	4	
087	264_087	X	CCV				09/23/09 12:28	1.0	3	

TFB 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 3 through 8.

TFB 09/21/09 : Runs 1-2 did not run.

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 9 through 40.

TFB 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 41 through 87.

Standards used: 1=S11825 2=S12545 3=S12822 4=S12547 5=S12546

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813 12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895 23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869385421

Instrument : GC26A Begun : 09/24/09 15:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	267a001	X	IB				09/24/09 15:41	1.0		
002	267a002	X	CMARKER				09/24/09 16:09	1.0	1	
003	267a003	CCV	DSL_1000				09/24/09 16:38	1.0	2	
004	267a004	CCV	MO_500				09/24/09 17:06	1.0	3	
005	267a005	CCV	JP5_250				09/24/09 17:34	1.0	4	
006	267a006	BLANK	QC513136		Water	155181	09/24/09 20:23	1.0		
007	267a007	BLANK	QC513136	S	Water	155181	09/24/09 20:51	1.0		
008	267a008	LCS	QC513137	S	Water	155181	09/24/09 21:19	1.0		
009	267a009	LCS	QC513142	S	Water	155181	09/24/09 21:47	1.0		
010	267a010	MSS	214921-006		Water	155181	09/24/09 22:15	1.0		
011	267a011	MS	QC513138		Water	155181	09/24/09 22:43	1.0		1:BUNKC:12-40=7000
012	267a012	MSD	QC513139		Water	155181	09/24/09 23:11	1.0		1:BUNKC:12-40=7100
013	267a013	MSS	215005-003		Water	155181	09/24/09 23:39	1.0		
014	267a014	MS	QC513140		Water	155181	09/25/09 00:08	1.0		
015	267a015	MSD	QC513141		Water	155181	09/25/09 00:36	1.0		
016	267a016	CCV	DSL_250				09/25/09 01:04	1.0	5	
017	267a017	CCV	MO_500				09/25/09 01:32	1.0	3	
018	267a018	CCV	JP5_250				09/25/09 02:00	1.0	4	
019	267a019	X	CCV				09/25/09 02:28	1.0	6	
020	267a020	X	CCV				09/25/09 02:57	1.0	3	
021	267a021	X	CCV				09/25/09 03:25	1.0	4	
022	267a022	BLANK	QC512557	S	Water	155038	09/25/09 03:53	1.0		
023	267a023	SAMPLE	215005-002		Water	155181	09/25/09 04:20	1.0		
024	267a024	SAMPLE	215005-001		Water	155181	09/25/09 04:49	1.0		
025	267a025	SAMPLE	215033-004		Water	155181	09/25/09 05:17	1.0		
026	267a026	SAMPLE	215033-003		Water	155181	09/25/09 05:45	1.0		
027	267a027	SAMPLE	215033-002		Water	155181	09/25/09 06:13	1.0		
028	267a028	SAMPLE	215033-001		Water	155181	09/25/09 06:41	1.0		
029	267a029	SAMPLE	215065-005		Water	155181	09/25/09 07:09	1.0		
030	267a030	X	IB				09/25/09 07:37	1.0		
031	267a031	SAMPLE	214873-001	S	Water	155038	09/25/09 08:05	1.0		
032	267a032	SAMPLE	214873-002	S	Water	155038	09/25/09 08:33	1.0		
033	267a033	X	CMARKER				09/25/09 09:01	1.0	1	
034	267a034	CCV	DSL_250				09/25/09 09:32	1.0	5	
035	267a035	CCV	MO_500				09/25/09 10:00	1.0	3	
036	267a036	CCV	JP5_250				09/25/09 10:28	1.0	4	
037	267a037	SAMPLE	214851-017		Water	155075	09/25/09 10:57	1.0		
038	267a038	SAMPLE	214851-016		Water	155075	09/25/09 11:25	1.0		
039	267a039	SAMPLE	214851-014		Water	155075	09/25/09 11:53	1.0		
040	267a040	SAMPLE	214851-015		Water	155075	09/25/09 12:22	1.0		
041	267a041	SAMPLE	214881-001		Water	155075	09/25/09 12:50	1.0		
042	267a042	CCV	DSL_1000				09/25/09 13:18	1.0	2	
043	267a043	CCV	MO_500				09/25/09 13:46	1.0	3	
044	267a044	CCV	JP5_250				09/25/09 14:20	1.0	4	

TFB 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 43.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12969 5=S12545 6=S12546

SAMPLE PREPARATION SUMMARY

Batch # : 155075 Analysis : TEH
Started By : SFL Prep Date : 18-SEP-2009 16:45 Finished By : SFL
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12972 Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214851-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-009		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
214851-010		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-011		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-012		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-013		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-014		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-015		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-016		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-017		Water	500	2.5	1	0.005	7	.5				TEHM	
214881-001		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214923-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214924-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-010		Water	500	2.5	1	0.005	7	.5				TEHM	
QC512696	BLANK	Water	500	2.5	1	0.005		.5					
QC512697	LCS	Water	500	2.5	1	0.005		.5	.5				
QC512698	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC512699	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC512700	LCS	Water	500	2.5	1	0.005		.5		.5			

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

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LIMS Batch No: 155075
LIMS Analysis: TEH
Date Extracted: 9/18/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☐ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214851-003	D	500	7	2.5		
5	E					
9	L					MSS
10	D					
11						
12						
13						
14						
15						
16						
17						
214881-001						
214922-004	I					
05						
214923-009	D					
214924-002	H					
214925-007	D					
9						
10						
MB BLC9/20/09						
LCS 97						
MS 98	K		7			
MSD 99						
LCS 100						MO *

SFL 9/20/09

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129348	SFL 9/18/09
0.5/0.5X mL of TEH_SP was added to all spikes	S129728/S122900	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F0093334	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1645	
Extraction End Time:	12:25	SFL 9/19/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SFL 9/20/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49001904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/18/09

Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

9/21/09

Reviewed by **Date**

Laboratory Job Number 214851

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091109B	Batch#:	155193
Lab ID:	214851-001	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091109B	Batch#:	155193
Lab ID:	214851-001	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8C-9C1	Batch#:	155193
Lab ID:	214851-002	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	2.0	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.3	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8C-9C1	Batch#:	155193
Lab ID:	214851-002	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	0.8	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	120	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8B-9C1	Batch#:	155193
Lab ID:	214851-003	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D2
Chloromethane	ND	2.0	D2
Vinyl Chloride	ND	1.0	D2
Bromomethane	ND	2.0	D2
Chloroethane	ND	2.0	D2
Trichlorofluoromethane	ND	2.0	D2
Iodomethane	ND	20	D2
Acetone	ND	20	D2
1,1-Dichloroethene	ND	1.0	D2
Methylene Chloride	ND	20	D2
Carbon Disulfide	ND	1.0	D2
MTBE	140	1.0	D2
trans-1,2-Dichloroethene	ND	1.0	D2
Vinyl Acetate	ND	20	D2
1,1-Dichloroethane	5.0	1.0	D2
2-Butanone	ND	20	D2
cis-1,2-Dichloroethene	ND	1.0	D2
2,2-Dichloropropane	ND	1.0	D2
Chloroform	ND	1.0	D2
Bromochloromethane	ND	1.0	D2
1,1,1-Trichloroethane	ND	1.0	D2
1,1-Dichloropropene	ND	1.0	D2
Carbon Tetrachloride	ND	1.0	D2
1,2-Dichloroethane	ND	1.0	D2
Benzene	ND	1.0	D2
Trichloroethene	3.1	1.0	D2
1,2-Dichloropropane	ND	1.0	D2
Bromodichloromethane	ND	1.0	D2
Dibromomethane	ND	1.0	D2
4-Methyl-2-Pentanone	ND	20	D2 V9
cis-1,3-Dichloropropene	ND	1.0	D2
Toluene	ND	1.0	D2
trans-1,3-Dichloropropene	ND	1.0	D2
1,1,2-Trichloroethane	ND	1.0	D2
2-Hexanone	ND	20	D2 V9
1,3-Dichloropropane	ND	1.0	D2
Tetrachloroethene	ND	1.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8B-9C1	Batch#:	155193
Lab ID:	214851-003	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D2
1,2-Dibromoethane	ND	1.0	D2
Chlorobenzene	ND	1.0	D2
1,1,1,2-Tetrachloroethane	ND	1.0	D2
Ethylbenzene	ND	1.0	D2
m,p-Xylenes	ND	1.0	D2
o-Xylene	ND	1.0	D2
Styrene	ND	1.0	D2
Bromoform	ND	2.0	D2
Isopropylbenzene	ND	1.0	D2
1,1,2,2-Tetrachloroethane	ND	1.0	D2
1,2,3-Trichloropropane	ND	1.0	D2
Propylbenzene	ND	1.0	D2
Bromobenzene	ND	1.0	D2
1,3,5-Trimethylbenzene	ND	1.0	D2
2-Chlorotoluene	ND	1.0	D2
4-Chlorotoluene	ND	1.0	D2
tert-Butylbenzene	ND	1.0	D2
1,2,4-Trimethylbenzene	ND	1.0	D2
sec-Butylbenzene	ND	1.0	D2
para-Isopropyl Toluene	ND	1.0	D2
1,3-Dichlorobenzene	ND	1.0	D2
1,4-Dichlorobenzene	ND	1.0	D2
n-Butylbenzene	ND	1.0	D2
1,2-Dichlorobenzene	ND	1.0	D2
1,2-Dibromo-3-Chloropropane	ND	4.0	D2
1,2,4-Trichlorobenzene	ND	1.0	D2
Hexachlorobutadiene	ND	4.0	D2 V9
Naphthalene	ND	4.0	D2
1,2,3-Trichlorobenzene	ND	1.0	D2
Xylene (total)	ND	1.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8A-9C1	Batch#:	155193
Lab ID:	214851-004	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	4.7	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	1.1	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	3.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.8	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	7.1	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8A-9C1	Batch#:	155193
Lab ID:	214851-004	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-97A-9C1	Batch#:	155193
Lab ID:	214851-005	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	1.6	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	2.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	37	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	16	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.1	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-97A-9C1	Batch#:	155193
Lab ID:	214851-005	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	122 *	78-120	S1

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-84A-9C1	Batch#:	155193
Lab ID:	214851-006	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	2.4	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	5.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.3	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-84A-9C1	Batch#:	155193
Lab ID:	214851-006	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-513-9C1	Batch#:	155248
Lab ID:	214851-007	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	2.5	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	5.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.3	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-513-9C1	Batch#:	155248
Lab ID:	214851-007	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-84C-9C1	Batch#:	155193
Lab ID:	214851-008	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	16	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	7.8	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.2	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-84C-9C1	Batch#:	155193
Lab ID:	214851-008	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	M1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	M1
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 M1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-110A-9C1	Batch#:	155193
Lab ID:	214851-010	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-110A-9C1	Batch#:	155193
Lab ID:	214851-010	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-123A-9C1	Batch#:	155193
Lab ID:	214851-011	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-123A-9C1	Batch#:	155193
Lab ID:	214851-011	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-109A-9C1	Batch#:	155193
Lab ID:	214851-012	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-109A-9C1	Batch#:	155193
Lab ID:	214851-012	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-101A-9C1	Batch#:	155193
Lab ID:	214851-013	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	0.8	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-101A-9C1	Batch#:	155193
Lab ID:	214851-013	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-100A-9C1	Batch#:	155248
Lab ID:	214851-014	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-100A-9C1	Batch#:	155248
Lab ID:	214851-014	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-103A-9C1	Batch#:	155248
Lab ID:	214851-015	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-103A-9C1	Batch#:	155248
Lab ID:	214851-015	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	112	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-129A-9C1	Batch#:	155248
Lab ID:	214851-016	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-129A-9C1	Batch#:	155248
Lab ID:	214851-016	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-507-9C1	Batch#:	155248
Lab ID:	214851-017	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	13	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-507-9C1	Batch#:	155248
Lab ID:	214851-017	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513189	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.28	109	56-140	
Chloromethane	25.00	23.09	92	46-142	
Vinyl Chloride	25.00	24.96	100	49-136	
Bromomethane	25.00	22.91	92	42-154	
Chloroethane	25.00	27.24	109	51-133	
Trichlorofluoromethane	25.00	24.65	99	63-135	
Iodomethane	25.00	22.30	89	70-130	
Acetone	25.00	21.59	86	48-130	
1,1-Dichloroethene	25.00	26.43	106	68-133	
Methylene Chloride	25.00	25.95	104	71-120	
Carbon Disulfide	25.00	24.83	99	56-120	
MTBE	25.00	23.09	92	58-120	
trans-1,2-Dichloroethene	25.00	28.33	113	80-120	
Vinyl Acetate	25.00	21.20	85	63-124	
1,1-Dichloroethane	25.00	26.80	107	77-120	
2-Butanone	25.00	21.69	87	57-120	
cis-1,2-Dichloroethene	25.00	26.57	106	75-120	
2,2-Dichloropropane	25.00	23.90	96	72-128	
Chloroform	25.00	24.62	98	78-120	
Bromochloromethane	25.00	27.14	109	78-120	
1,1,1-Trichloroethane	25.00	25.84	103	78-120	
1,1-Dichloropropene	25.00	24.98	100	75-120	
Carbon Tetrachloride	25.00	23.48	94	80-120	
1,2-Dichloroethane	25.00	22.74	91	74-120	
Benzene	25.00	26.43	106	77-120	
Trichloroethene	25.00	25.32	101	78-122	
1,2-Dichloropropane	25.00	25.21	101	76-120	
Bromodichloromethane	25.00	24.79	99	78-120	
Dibromomethane	25.00	23.72	95	77-120	
4-Methyl-2-Pentanone	25.00	19.32 b	77	65-120	V9
cis-1,3-Dichloropropene	25.00	26.17	105	76-120	
Toluene	25.00	25.19	101	73-120	
trans-1,3-Dichloropropene	25.00	22.56	90	72-120	
1,1,2-Trichloroethane	25.00	25.09	100	76-120	
2-Hexanone	25.00	18.40 b	74	57-121	V9
1,3-Dichloropropane	25.00	25.16	101	75-120	
Tetrachloroethene	25.00	23.26	93	77-120	
Dibromochloromethane	25.00	24.29	97	76-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513189	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	24.15	97	77-120	
Chlorobenzene	25.00	24.93	100	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.39	98	77-120	
Ethylbenzene	25.00	25.20	101	78-120	
m,p-Xylenes	50.00	51.09	102	77-120	
o-Xylene	25.00	24.62	98	77-120	
Styrene	25.00	25.39	102	77-120	
Bromoform	25.00	21.91	88	74-121	
Isopropylbenzene	25.00	23.32	93	71-120	
1,1,2,2-Tetrachloroethane	25.00	24.69	99	73-120	
1,2,3-Trichloropropane	25.00	26.17	105	72-120	
Propylbenzene	25.00	24.95	100	76-120	
Bromobenzene	25.00	25.99	104	75-120	
1,3,5-Trimethylbenzene	25.00	26.45	106	77-120	
2-Chlorotoluene	25.00	26.95	108	76-120	
4-Chlorotoluene	25.00	25.76	103	78-120	
tert-Butylbenzene	25.00	22.61	90	76-120	
1,2,4-Trimethylbenzene	25.00	27.03	108	77-120	
sec-Butylbenzene	25.00	21.97	88	80-120	
para-Isopropyl Toluene	25.00	22.50	90	76-120	
1,3-Dichlorobenzene	25.00	24.86	99	75-120	
1,4-Dichlorobenzene	25.00	24.37	97	77-120	
n-Butylbenzene	25.00	29.42	118	76-120	
1,2-Dichlorobenzene	25.00	24.85	99	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.75	95	65-120	
1,2,4-Trichlorobenzene	25.00	22.95	92	73-121	
Hexachlorobutadiene	25.00	19.56 b	78	73-123	V9
Naphthalene	25.00	25.60	102	62-121	
1,2,3-Trichlorobenzene	25.00	24.06	96	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	104	78-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513190	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	V9
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513190	Batch#:	155193
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V9
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513213

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	27.36	109	56-140	
Chloromethane	<0.2000	25.00	28.82	115	46-142	
Vinyl Chloride	<0.1000	25.00	29.97	120	49-136	
Bromomethane	<0.2000	25.00	26.02	104	42-154	
Chloroethane	<0.2000	25.00	28.78	115	51-133	
Trichlorofluoromethane	<0.2000	25.00	27.14	109	63-135	
Iodomethane	<2.000	25.00	27.74	111	60-140	
Acetone	<1.000	25.00	25.60	102	48-130	
1,1-Dichloroethene	0.3522	25.00	28.39	112	68-133	
Methylene Chloride	0.1853	25.00	28.07	112	71-120	
Carbon Disulfide	<0.1000	25.00	27.86	111	56-120	
MTBE	<0.1000	25.00	25.05	100	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	30.20	121 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.57	82	63-124	
1,1-Dichloroethane	0.1000	25.00	29.91	119	77-120	
2-Butanone	<2.000	25.00	24.94	100	57-120	
cis-1,2-Dichloroethene	0.8774	25.00	28.71	111	75-120	
2,2-Dichloropropane	<0.1000	25.00	25.83	103	72-128	
Chloroform	0.4176	25.00	27.62	109	78-120	
Bromochloromethane	<0.1000	25.00	28.42	114	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	29.08	116	78-120	
1,1-Dichloropropene	<0.1000	25.00	27.07	108	75-120	
Carbon Tetrachloride	<0.1000	25.00	25.71	103	80-120	
1,2-Dichloroethane	<0.1000	25.00	24.80	99	74-120	
Benzene	<0.1000	25.00	27.66	111	77-120	
Trichloroethene	3.162	25.00	29.88	107	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.53	106	76-120	
Bromodichloromethane	<0.1000	25.00	26.02	104	78-120	
Dibromomethane	<0.1000	25.00	25.11	100	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.44 b	86	65-120	V9
cis-1,3-Dichloropropene	<0.1000	25.00	26.98	108	76-120	
Toluene	<0.1000	25.00	25.61	102	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	22.72	91	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.44	102	76-120	
2-Hexanone	<2.000	25.00	19.20 b	77	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.70	103	75-120	
Tetrachloroethene	0.4285	25.00	23.92	94	77-120	
Dibromochloromethane	<0.1000	25.00	24.31	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.12	96	77-120	
Chlorobenzene	<0.1000	25.00	24.93	100	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.19	97	77-120	
Ethylbenzene	<0.1000	25.00	26.13	105	78-120	
m,p-Xylenes	<0.1594	50.00	51.31	103	77-120	
o-Xylene	<0.1000	25.00	24.77	99	77-120	
Styrene	<0.1000	25.00	24.00	96	77-120	
Bromoform	<0.2000	25.00	22.09	88	74-121	
Isopropylbenzene	<0.1000	25.00	24.21	97	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	26.17	105	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	28.56	114	72-120	
Propylbenzene	<0.1000	25.00	25.45	102	76-120	
Bromobenzene	<0.1000	25.00	26.30	105	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	27.49	110	77-120	
2-Chlorotoluene	<0.1000	25.00	28.17	113	76-120	
4-Chlorotoluene	<0.1000	25.00	26.41	106	78-120	
tert-Butylbenzene	<0.1000	25.00	22.65	91	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	28.11	112	77-120	
sec-Butylbenzene	<0.1029	25.00	22.68	91	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.81	95	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.11	100	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.46	98	77-120	
n-Butylbenzene	<0.1285	25.00	33.41	134 *	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.10	100	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	25.40	102	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	24.23	97	73-121	
Hexachlorobutadiene	<0.4000	25.00	21.20 b	85	73-123	V9
Naphthalene	<0.4000	25.00	27.48	110	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	25.80	103	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513214

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	26.67	107	56-140	3	24	
Chloromethane	25.00	28.88	116	46-142	0	24	
Vinyl Chloride	25.00	29.67	119	49-136	1	24	
Bromomethane	25.00	27.31	109	42-154	5	24	
Chloroethane	25.00	28.14	113	51-133	2	25	
Trichlorofluoromethane	25.00	25.79	103	63-135	5	20	
Iodomethane	25.00	30.22	121	60-140	9	30	
Acetone	25.00	25.43	102	48-130	1	41	
1,1-Dichloroethene	25.00	28.24	112	68-133	1	20	
Methylene Chloride	25.00	27.09	108	71-120	4	20	
Carbon Disulfide	25.00	26.55	106	56-120	5	20	
MTBE	25.00	25.16	101	58-120	0	21	
trans-1,2-Dichloroethene	25.00	29.51	118	80-120	2	24	
Vinyl Acetate	25.00	20.35	81	63-124	1	24	
1,1-Dichloroethane	25.00	28.60	114	77-120	4	20	
2-Butanone	25.00	24.63	99	57-120	1	32	
cis-1,2-Dichloroethene	25.00	28.12	109	75-120	2	20	
2,2-Dichloropropane	25.00	24.71	99	72-128	4	24	
Chloroform	25.00	26.36	104	78-120	5	20	
Bromochloromethane	25.00	27.50	110	78-120	3	20	
1,1,1-Trichloroethane	25.00	28.04	112	78-120	4	20	
1,1-Dichloropropene	25.00	26.01	104	75-120	4	21	
Carbon Tetrachloride	25.00	24.24	97	80-120	6	21	
1,2-Dichloroethane	25.00	24.07	96	74-120	3	20	
Benzene	25.00	26.72	107	77-120	3	20	
Trichloroethene	25.00	28.93	103	78-122	3	20	
1,2-Dichloropropane	25.00	25.69	103	76-120	3	20	
Bromodichloromethane	25.00	25.45	102	78-120	2	20	
Dibromomethane	25.00	24.65	99	77-120	2	20	
4-Methyl-2-Pentanone	25.00	21.51 b	86	65-120	0	22	V9
cis-1,3-Dichloropropene	25.00	26.35	105	76-120	2	20	
Toluene	25.00	24.73	99	73-120	3	20	
trans-1,3-Dichloropropene	25.00	22.51	90	72-120	1	20	
1,1,2-Trichloroethane	25.00	25.24	101	76-120	1	20	
2-Hexanone	25.00	19.57 b	78	57-121	2	25	V9
1,3-Dichloropropane	25.00	25.38	102	75-120	1	20	
Tetrachloroethene	25.00	23.19	91	77-120	3	20	
Dibromochloromethane	25.00	23.82	95	76-120	2	20	
1,2-Dibromoethane	25.00	24.12	96	77-120	0	20	
Chlorobenzene	25.00	24.31	97	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	23.68	95	77-120	2	20	
Ethylbenzene	25.00	25.07	100	78-120	4	26	
m,p-Xylenes	50.00	49.26	99	77-120	4	20	
o-Xylene	25.00	23.69	95	77-120	4	20	
Styrene	25.00	22.77	91	77-120	5	20	
Bromoform	25.00	21.61	86	74-121	2	21	
Isopropylbenzene	25.00	23.33	93	71-120	4	20	
1,1,2,2-Tetrachloroethane	25.00	26.31	105	73-120	1	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-3-9C1	Batch#:	155193
MSS Lab ID:	214850-006	Sampled:	09/10/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	28.48	114	72-120	0	20	
Propylbenzene	25.00	24.70	99	76-120	3	20	
Bromobenzene	25.00	25.41	102	75-120	3	20	
1,3,5-Trimethylbenzene	25.00	27.70	111	77-120	1	20	
2-Chlorotoluene	25.00	26.98	108	76-120	4	20	
4-Chlorotoluene	25.00	25.43	102	78-120	4	20	
tert-Butylbenzene	25.00	22.14	89	76-120	2	21	
1,2,4-Trimethylbenzene	25.00	28.31	113	77-120	1	20	
sec-Butylbenzene	25.00	22.30	89	80-120	2	21	
para-Isopropyl Toluene	25.00	24.14	97	76-120	1	20	
1,3-Dichlorobenzene	25.00	24.32	97	75-120	3	20	
1,4-Dichlorobenzene	25.00	23.79	95	77-120	3	23	
n-Butylbenzene	25.00	33.34	133 *	76-120	0	21	M1
1,2-Dichlorobenzene	25.00	24.78	99	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	24.98	100	65-120	2	22	
1,2,4-Trichlorobenzene	25.00	24.26	97	73-121	0	20	
Hexachlorobutadiene	25.00	21.19 b	85	73-123	0	25	V9
Naphthalene	25.00	27.71	111	62-121	1	32	
1,2,3-Trichlorobenzene	25.00	25.84	103	66-123	0	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513420	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.90	112	56-140	
Chloromethane	25.00	24.65	99	46-142	
Vinyl Chloride	25.00	25.76	103	49-136	
Bromomethane	25.00	27.88	112	42-154	
Chloroethane	25.00	27.04	108	51-133	
Trichlorofluoromethane	25.00	24.48	98	63-135	
Iodomethane	25.00	30.02 b	120	70-130	V9
Acetone	25.00	22.66	91	48-130	
1,1-Dichloroethene	25.00	26.57	106	68-133	
Methylene Chloride	25.00	26.76	107	71-120	
Carbon Disulfide	25.00	25.62 b	102	56-120	V3
MTBE	25.00	23.82	95	58-120	
trans-1,2-Dichloroethene	25.00	28.91	116	80-120	
Vinyl Acetate	25.00	22.15	89	63-124	
1,1-Dichloroethane	25.00	27.22	109	77-120	
2-Butanone	25.00	23.31	93	57-120	
cis-1,2-Dichloroethene	25.00	27.08	108	75-120	
2,2-Dichloropropane	25.00	27.29	109	72-128	
Chloroform	25.00	25.35	101	78-120	
Bromochloromethane	25.00	27.92	112	78-120	
1,1,1-Trichloroethane	25.00	26.20	105	78-120	
1,1-Dichloropropene	25.00	24.75	99	75-120	
Carbon Tetrachloride	25.00	23.61	94	80-120	
1,2-Dichloroethane	25.00	23.01	92	74-120	
Benzene	25.00	26.25	105	77-120	
Trichloroethene	25.00	25.90	104	78-122	
1,2-Dichloropropane	25.00	25.50	102	76-120	
Bromodichloromethane	25.00	25.14	101	78-120	
Dibromomethane	25.00	24.64	99	77-120	
4-Methyl-2-Pentanone	25.00	20.47	82	65-120	
cis-1,3-Dichloropropene	25.00	27.34	109	76-120	
Toluene	25.00	24.90	100	73-120	
trans-1,3-Dichloropropene	25.00	23.07	92	72-120	
1,1,2-Trichloroethane	25.00	25.30	101	76-120	
2-Hexanone	25.00	19.29 b	77	57-121	V9
1,3-Dichloropropane	25.00	25.29	101	75-120	
Tetrachloroethene	25.00	23.12	92	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513420	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.44	98	76-120	
1,2-Dibromoethane	25.00	24.58	98	77-120	
Chlorobenzene	25.00	24.69	99	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.12	96	77-120	
Ethylbenzene	25.00	25.14	101	78-120	
m,p-Xylenes	50.00	49.64	99	77-120	
o-Xylene	25.00	23.99	96	77-120	
Styrene	25.00	24.94	100	77-120	
Bromoform	25.00	22.35	89	74-121	
Isopropylbenzene	25.00	23.32	93	71-120	
1,1,2,2-Tetrachloroethane	25.00	26.04	104	73-120	
1,2,3-Trichloropropane	25.00	28.42	114	72-120	
Propylbenzene	25.00	24.65	99	76-120	
Bromobenzene	25.00	26.71	107	75-120	
1,3,5-Trimethylbenzene	25.00	28.11	112	77-120	
2-Chlorotoluene	25.00	27.39	110	76-120	
4-Chlorotoluene	25.00	25.84	103	78-120	
tert-Butylbenzene	25.00	21.99	88	76-120	
1,2,4-Trimethylbenzene	25.00	28.73	115	77-120	
sec-Butylbenzene	25.00	22.42	90	80-120	
para-Isopropyl Toluene	25.00	24.59	98	76-120	
1,3-Dichlorobenzene	25.00	25.11	100	75-120	
1,4-Dichlorobenzene	25.00	24.58	98	77-120	
n-Butylbenzene	25.00	34.80	139 *	76-120	L1
1,2-Dichlorobenzene	25.00	25.46	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.94	100	65-120	
1,2,4-Trichlorobenzene	25.00	25.60	102	73-121	
Hexachlorobutadiene	25.00	22.47	90	73-123	
Naphthalene	25.00	28.42	114	62-121	
1,2,3-Trichlorobenzene	25.00	26.71	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513421	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513421	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513430

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	30.19	121	56-140	
Chloromethane	<0.2000	25.00	29.34	117	46-142	
Vinyl Chloride	<0.1000	25.00	29.85	119	49-136	
Bromomethane	<0.2000	25.00	28.55	114	42-154	
Chloroethane	<0.2000	25.00	29.56	118	51-133	
Trichlorofluoromethane	<0.2000	25.00	27.84	111	63-135	
Iodomethane	<2.000	25.00	33.08 b	132	60-140	V9
Acetone	<1.000	25.00	25.74	103	48-130	
1,1-Dichloroethene	<0.1000	25.00	29.58	118	68-133	
Methylene Chloride	0.1268	25.00	28.77	115	71-120	
Carbon Disulfide	<0.1000	25.00	28.46 b	114	56-120	V3
MTBE	<0.1000	25.00	25.32	101	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	31.31	125 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.80	83	63-124	
1,1-Dichloroethane	<0.1000	25.00	30.44	122 *	77-120	M1
2-Butanone	<2.000	25.00	25.06	100	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	28.82	115	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.15	109	72-128	
Chloroform	0.1233	25.00	27.99	111	78-120	
Bromochloromethane	<0.1000	25.00	28.59	114	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	30.08	120	78-120	
1,1-Dichloropropene	<0.1000	25.00	27.63	111	75-120	
Carbon Tetrachloride	<0.1000	25.00	26.34	105	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.21	101	74-120	
Benzene	<0.1000	25.00	28.12	112	77-120	
Trichloroethene	<0.1000	25.00	27.35	109	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.93	108	76-120	
Bromodichloromethane	<0.1000	25.00	26.73	107	78-120	
Dibromomethane	<0.1000	25.00	25.58	102	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.70	87	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	27.77	111	76-120	
Toluene	<0.1000	25.00	25.87	103	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.03	92	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.34	101	76-120	
2-Hexanone	<2.000	25.00	19.71 b	79	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.99	104	75-120	
Tetrachloroethene	<0.1316	25.00	23.79	95	77-120	
Dibromochloromethane	<0.1000	25.00	24.46	98	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.41	98	77-120	
Chlorobenzene	<0.1000	25.00	25.18	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.36	97	77-120	
Ethylbenzene	<0.1000	25.00	26.59	106	78-120	
m,p-Xylenes	<0.1594	50.00	53.10	106	77-120	
o-Xylene	<0.1000	25.00	25.49	102	77-120	
Styrene	<0.1000	25.00	24.89	100	77-120	
Bromoform	<0.2000	25.00	22.00	88	74-121	
Isopropylbenzene	<0.1000	25.00	24.21	97	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.25	101	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC		Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	27.45	110		72-120	
Propylbenzene	<0.1000	25.00	25.89	104		76-120	
Bromobenzene	<0.1000	25.00	25.68	103		75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	29.12	116		77-120	
2-Chlorotoluene	<0.1000	25.00	28.40	114		76-120	
4-Chlorotoluene	<0.1000	25.00	26.65	107		78-120	
tert-Butylbenzene	<0.1000	25.00	23.05	92		76-120	
1,2,4-Trimethylbenzene	0.1251	25.00	30.14	120		77-120	
sec-Butylbenzene	<0.1029	25.00	23.14	93		80-120	
para-Isopropyl Toluene	<0.1000	25.00	25.22	101		76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.26	101		75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.55	98		77-120	
n-Butylbenzene	<0.1285	25.00	37.31	149	*	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.44	102		76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.11	96		65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	25.51	102		73-121	
Hexachlorobutadiene	<0.4000	25.00	22.42	90		73-123	
Naphthalene	<0.4000	25.00	28.28	113		62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	26.88	108		66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	106	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513431

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	28.23	113	56-140	7	24	
Chloromethane	25.00	27.52	110	46-142	6	24	
Vinyl Chloride	25.00	28.07	112	49-136	6	24	
Bromomethane	25.00	31.18	125	42-154	9	24	
Chloroethane	25.00	28.19	113	51-133	5	25	
Trichlorofluoromethane	25.00	25.54	102	63-135	9	20	
Iodomethane	25.00	33.61 b	134	60-140	2	30	V9
Acetone	25.00	24.48	98	48-130	5	41	
1,1-Dichloroethene	25.00	27.63	111	68-133	7	20	
Methylene Chloride	25.00	27.19	108	71-120	6	20	
Carbon Disulfide	25.00	26.40 b	106	56-120	8	20	V3
MTBE	25.00	24.57	98	58-120	3	21	
trans-1,2-Dichloroethene	25.00	29.19	117	80-120	7	24	
Vinyl Acetate	25.00	19.55	78	63-124	6	24	
1,1-Dichloroethane	25.00	28.00	112	77-120	8	20	
2-Butanone	25.00	23.56	94	57-120	6	32	
cis-1,2-Dichloroethene	25.00	27.25	109	75-120	6	20	
2,2-Dichloropropane	25.00	24.62	98	72-128	10	24	
Chloroform	25.00	25.79	103	78-120	8	20	
Bromochloromethane	25.00	27.28	109	78-120	5	20	
1,1,1-Trichloroethane	25.00	27.46	110	78-120	9	20	
1,1-Dichloropropene	25.00	25.65	103	75-120	7	21	
Carbon Tetrachloride	25.00	24.43	98	80-120	8	21	
1,2-Dichloroethane	25.00	23.57	94	74-120	7	20	
Benzene	25.00	26.30	105	77-120	7	20	
Trichloroethene	25.00	26.02	104	78-122	5	20	
1,2-Dichloropropane	25.00	25.38	102	76-120	6	20	
Bromodichloromethane	25.00	25.35	101	78-120	5	20	
Dibromomethane	25.00	24.74	99	77-120	3	20	
4-Methyl-2-Pentanone	25.00	20.39	82	65-120	6	22	
cis-1,3-Dichloropropene	25.00	26.41	106	76-120	5	20	
Toluene	25.00	24.24	97	73-120	6	20	
trans-1,3-Dichloropropene	25.00	22.25	89	72-120	3	20	
1,1,2-Trichloroethane	25.00	24.77	99	76-120	2	20	
2-Hexanone	25.00	18.31 b	73	57-121	7	25	V9
1,3-Dichloropropane	25.00	24.95	100	75-120	4	20	
Tetrachloroethene	25.00	22.55	90	77-120	5	20	
Dibromochloromethane	25.00	23.66	95	76-120	3	20	
1,2-Dibromoethane	25.00	23.81	95	77-120	2	20	
Chlorobenzene	25.00	23.82	95	78-120	6	20	
1,1,1,2-Tetrachloroethane	25.00	23.32	93	77-120	4	20	
Ethylbenzene	25.00	24.76	99	78-120	7	26	
m,p-Xylenes	50.00	49.00	98	77-120	8	20	
o-Xylene	25.00	23.70	95	77-120	7	20	
Styrene	25.00	23.24	93	77-120	7	20	
Bromoform	25.00	21.52	86	74-121	2	21	
Isopropylbenzene	25.00	22.72	91	71-120	6	20	
1,1,2,2-Tetrachloroethane	25.00	24.71	99	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214851	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	27.41	110	72-120	0	20	
Propylbenzene	25.00	24.18	97	76-120	7	20	
Bromobenzene	25.00	24.92	100	75-120	3	20	
1,3,5-Trimethylbenzene	25.00	27.45	110	77-120	6	20	
2-Chlorotoluene	25.00	26.62	106	76-120	6	20	
4-Chlorotoluene	25.00	25.04	100	78-120	6	20	
tert-Butylbenzene	25.00	21.44	86	76-120	7	21	
1,2,4-Trimethylbenzene	25.00	28.48	113	77-120	6	20	
sec-Butylbenzene	25.00	21.58	86	80-120	7	21	
para-Isopropyl Toluene	25.00	23.88	96	76-120	5	20	
1,3-Dichlorobenzene	25.00	24.13	97	75-120	5	20	
1,4-Dichlorobenzene	25.00	23.53	94	77-120	4	23	
n-Butylbenzene	25.00	34.08	136 *	76-120	9	21	M1
1,2-Dichlorobenzene	25.00	24.43	98	76-120	4	20	
1,2-Dibromo-3-Chloropropane	25.00	23.81	95	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	25.02	100	73-121	2	20	
Hexachlorobutadiene	25.00	20.79	83	73-123	8	25	
Naphthalene	25.00	28.15	113	62-121	0	32	
1,2,3-Trichlorobenzene	25.00	26.54	106	66-123	1	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	107	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214851 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214851 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839383527002 File : kin02 Time : 23-SEP-2009 08:31

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	12007	15.89	
75	30% - 60% of mass 95	35141	46.51	
95		75562	100.00	
96	5% - 9% of mass 95	5374	7.11	
173	< 2% of mass 174	164	0.27	
174	> 50% and < 100% of mass 95	59744	79.07	
175	5% - 9% of mass 174	4335	7.26	
176	> 95% and < 101% of mass 174	57358	96.01	
177	5% - 9% of mass 176	3513	6.12	

Analyst: BO Date: 09/23/09 Reviewer: LW Date: 09/24/09

CURTIS & TOMPKINS BFB TUNE FOR 214851 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839384947003 File : kio03 Time : 24-SEP-2009 08:23

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	15064	16.59	
75	30% - 60% of mass 95	42960	47.30	
95		90829	100.00	
96	5% - 9% of mass 95	6194	6.82	
173	< 2% of mass 174	118	0.18	
174	> 50% and < 100% of mass 95	64893	71.45	
175	5% - 9% of mass 174	4914	7.57	
176	> 95% and < 101% of mass 174	63775	98.28	
177	5% - 9% of mass 176	4504	7.06	

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214851 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214851 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214851 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513189 IDF : 1.0
Seqnum : 839383527003.2 File : kin03 Time : 23-SEP-2009 08:44
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12923 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5842	25.00	27.28	ug/L	9	20	0.0500	u
Chloromethane	0.5160	0.4765	25.00	23.09	ug/L	-8	20	0.1000	u
Vinyl Chloride	0.5175	0.5166	25.00	24.96	ug/L	0	20	0.0500	u
Bromomethane	0.2608	0.2390	25.00	22.91	ug/L	-8	20	0.0500	u
Chloroethane	0.4094	0.4461	25.00	27.24	ug/L	9	20	0.0500	u
Trichlorofluoromethane	0.7415	0.7310	25.00	24.65	ug/L	-1	20	0.0500	u
Iodomethane	0.2599	0.2285	25.00	22.30	ug/L	-11	20	0.0500	u
Acetone	0.1382	0.1193	25.00	21.59	ug/L	-14	20	0.0500	u
1,1-Dichloroethene	0.3747	0.3962	25.00	26.43	ug/L	6	20	0.0500	u
Methylene Chloride	0.5280	0.5480	25.00	25.95	ug/L	4	20	0.0500	u
Carbon Disulfide	1.4090	1.3992	25.00	24.83	ug/L	-1	20	0.0500	u
MTBE	1.5447	1.4267	25.00	23.09	ug/L	-8	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5172	25.00	28.33	ug/L	13	20	0.0500	u
Vinyl Acetate	0.9726	0.8248	25.00	21.20	ug/L	-15	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0082	25.00	26.80	ug/L	7	20	0.1000	u
2-Butanone	0.2331	0.2022	25.00	21.69	ug/L	-13	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.5782	25.00	26.57	ug/L	6	20	0.0500	u
2,2-Dichloropropane	0.7134	0.6819	25.00	23.90	ug/L	-4	20	0.0500	u
Chloroform	0.9238	0.9097	25.00	24.62	ug/L	-2	20	0.0500	u
Bromochloromethane	0.2354	0.2556	25.00	27.14	ug/L	9	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7270	25.00	25.84	ug/L	3	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4213	25.00	24.98	ug/L	0	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3272	25.00	23.48	ug/L	-6	20	0.0500	u
1,2-Dichloroethane	0.4392	0.3996	25.00	22.74	ug/L	-9	20	0.0500	u
Benzene	1.3404	1.4169	25.00	26.43	ug/L	6	20	0.0500	u
Trichloroethene	0.3158	0.3198	25.00	25.32	ug/L	1	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3625	25.00	25.21	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3863	0.3831	25.00	24.79	ug/L	-1	20	0.0500	u
Dibromomethane	0.1802	0.1709	25.00	23.72	ug/L	-5	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2353	25.00	19.32	ug/L	**-23**	20	0.0500	c- u ***
cis-1,3-Dichloropropene	0.5168	0.5409	25.00	26.17	ug/L	5	20	0.0500	u
Toluene	0.9593	0.9667	25.00	25.19	ug/L	1	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5172	25.00	22.56	ug/L	-10	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1755	25.00	25.09	ug/L	0	20	0.0500	u
2-Hexanone	0.2445	0.1800	25.00	18.40	ug/L	**-26**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.6172	25.00	25.16	ug/L	1	20	0.0500	u
Tetrachloroethene	0.3329	0.3097	25.00	23.26	ug/L	-7	20	0.0500	u
Dibromochloromethane	0.3027	0.2941	25.00	24.29	ug/L	-3	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2945	25.00	24.15	ug/L	-3	20	0.0500	u
Chlorobenzene	1.0519	1.0489	25.00	24.93	ug/L	0	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3276	25.00	24.39	ug/L	-2	20	0.0500	u
Ethylbenzene	1.8115	1.8261	25.00	25.20	ug/L	1	20	0.0500	u
m,p-Xylenes	0.6304	0.6442	50.00	51.09	ug/L	2	20	0.0500	u
o-Xylene	0.6283	0.6187	25.00	24.62	ug/L	-2	20	0.0500	u
Styrene	1.0367	1.0527	25.00	25.39	ug/L	2	20	0.0500	u
Bromoform	0.1849	0.1865	25.00	21.91	ug/L	-12	20	0.1000	u
Isopropylbenzene	3.8595	3.6004	25.00	23.32	ug/L	-7	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9466	25.00	24.69	ug/L	-1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.0715	25.00	26.17	ug/L	5	20	0.0500	u
Propylbenzene	3.9448	3.9361	25.00	24.95	ug/L	0	20	0.0500	u
Bromobenzene	1.0220	1.0624	25.00	25.99	ug/L	4	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	2.9010	25.00	26.45	ug/L	6	20	0.0500	u
2-Chlorotoluene	3.1099	3.3525	25.00	26.95	ug/L	8	20	0.0500	u
4-Chlorotoluene	2.6572	2.7381	25.00	25.76	ug/L	3	20	0.0500	u
tert-Butylbenzene	2.1712	1.9640	25.00	22.61	ug/L	-10	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	2.8526	25.00	27.03	ug/L	8	20	0.0500	u
sec-Butylbenzene	3.1284	2.7496	25.00	21.97	ug/L	-12	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.2447	25.00	22.50	ug/L	-10	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6809	25.00	24.86	ug/L	-1	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6123	25.00	24.37	ug/L	-3	20	0.0500	u
n-Butylbenzene	2.4331	2.3850	25.00	29.42	ug/L	18	20	0.0500	u
1,2-Dichlorobenzene	1.6119	1.6020	25.00	24.85	ug/L	-1	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1671	25.00	23.75	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	0.9987	25.00	22.95	ug/L	-8	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3422	25.00	19.56	ug/L	**-22**	20	0.0500	c- u ***
Naphthalene	2.7279	2.7934	25.00	25.60	ug/L	2	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	0.9699	25.00	24.06	ug/L	-4	20	0.0500	u
Dibromofluoromethane	0.4472	0.4651	50.00	52.00	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3291	50.00	44.03	ug/L	-12	20	0.0500	u
Toluene-d8	1.4811	1.5465	50.00	52.21	ug/L	4	20	0.0500	u
Bromofluorobenzene	1.2424	1.2938	50.00	52.07	ug/L	4	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2226782	47.93	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3889840	58.97	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3378959	58.18	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1256121	27.72	17.10	17.10	0.00

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

-=low bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214851 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : 20PPB IDF : 1.0
Seqnum : 839384947004.1 File : kio04 Time : 24-SEP-2009 08:35
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12998 (25000X), S12773 (25000X), S12217 (50000X), S12929 (25000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5606	20.00	20.94	ug/L	5	20	0.0500	
Chloromethane	0.5160	0.4682	20.00	18.15	ug/L	-9	20	0.1000	
Vinyl Chloride	0.5175	0.5437	20.00	21.01	ug/L	5	20	0.0500	
Bromomethane	0.2608	0.2378	20.00	18.23	ug/L	-9	20	0.0500	
Chloroethane	0.4094	0.4106	20.00	20.06	ug/L	0	20	0.0500	
Trichlorofluoromethane	0.7415	0.7074	20.00	19.08	ug/L	-5	20	0.0500	
Acetone	0.1382	0.1313	20.00	19.00	ug/L	-5	20	0.0500	
1,1-Dichloroethene	0.3747	0.3961	20.00	21.14	ug/L	6	20	0.0500	
Iodomethane	0.2599	0.1715	20.00	14.36	ug/L	**-28**	20	0.0500	c- ***
Methylene Chloride	0.5280	0.5328	20.00	20.18	ug/L	1	20	0.0500	
Carbon Disulfide	1.4090	1.7365	20.00	24.65	ug/L	**23**	20	0.0500	c+ ***
MTBE	1.5447	1.6153	20.00	20.91	ug/L	5	20	0.0500	
trans-1,2-Dichloroethene	0.4564	0.4920	20.00	21.56	ug/L	8	20	0.0500	
Vinyl Acetate	0.9726	0.9666	20.00	19.87	ug/L	-1	20	0.0500	
1,1-Dichloroethane	0.9405	1.0020	20.00	21.31	ug/L	7	20	0.1000	
2-Butanone	0.2331	0.2247	20.00	19.28	ug/L	-4	20	0.0500	
2,2-Dichloropropane	0.7134	0.7830	20.00	21.95	ug/L	10	20	0.0500	
cis-1,2-Dichloroethene	0.5440	0.5687	20.00	20.90	ug/L	5	20	0.0500	
Chloroform	0.9238	0.8918	20.00	19.31	ug/L	-3	20	0.0500	
Bromochloromethane	0.2354	0.2479	20.00	21.06	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7032	0.7334	20.00	20.86	ug/L	4	20	0.0500	
1,1-Dichloropropene	0.4217	0.4092	20.00	19.41	ug/L	-3	20	0.0500	
Carbon Tetrachloride	0.3483	0.3245	20.00	18.63	ug/L	-7	20	0.0500	
1,2-Dichloroethane	0.4392	0.3850	20.00	17.53	ug/L	-12	20	0.0500	
Benzene	1.3404	1.3431	20.00	20.04	ug/L	0	20	0.0500	
Trichloroethene	0.3158	0.3120	20.00	19.76	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3595	0.3460	20.00	19.25	ug/L	-4	20	0.0500	
Bromodichloromethane	0.3863	0.3601	20.00	18.64	ug/L	-7	20	0.0500	
Dibromomethane	0.1802	0.1684	20.00	18.69	ug/L	-7	20	0.0500	
4-Methyl-2-Pentanone	0.3044	0.2467	20.00	16.21	ug/L	-19	20	0.0500	
cis-1,3-Dichloropropene	0.5168	0.5032	20.00	19.47	ug/L	-3	20	0.0500	
Toluene	0.9593	0.9012	20.00	18.79	ug/L	-6	20	0.0500	
trans-1,3-Dichloropropene	0.5730	0.5235	20.00	18.27	ug/L	-9	20	0.0500	
1,1,2-Trichloroethane	0.1749	0.1638	20.00	18.73	ug/L	-6	20	0.0500	
2-Hexanone	0.2445	0.1759	20.00	14.39	ug/L	**-28**	20	0.0500	c- ***
1,3-Dichloropropane	0.6133	0.5711	20.00	18.62	ug/L	-7	20	0.0500	
Tetrachloroethene	0.3329	0.2956	20.00	17.76	ug/L	-11	20	0.0500	
Dibromochloromethane	0.3027	0.2666	20.00	17.61	ug/L	-12	20	0.0500	
1,2-Dibromoethane	0.3049	0.2764	20.00	18.13	ug/L	-9	20	0.0500	
Chlorobenzene	1.0519	0.9667	20.00	18.38	ug/L	-8	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3358	0.3010	20.00	17.93	ug/L	-10	20	0.0500	
Ethylbenzene	1.8115	1.6984	20.00	18.75	ug/L	-6	20	0.0500	
m,p-Xylenes	0.6304	0.5826	40.00	36.97	ug/L	-8	20	0.0500	
o-Xylene	0.6283	0.5592	20.00	17.80	ug/L	-11	20	0.0500	
Styrene	1.0367	0.9263	20.00	17.87	ug/L	-11	20	0.0500	
Bromoform	0.1849	0.1728	20.00	16.56	ug/L	-17	20	0.1000	
Isopropylbenzene	3.8595	3.9015	20.00	20.22	ug/L	1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9033	20.00	18.84	ug/L	-6	20	0.3000	
1,2,3-Trichloropropane	1.0234	1.0642	20.00	20.80	ug/L	4	20	0.0500	
Propylbenzene	3.9448	3.7339	20.00	18.93	ug/L	-5	20	0.0500	
Bromobenzene	1.0220	0.9942	20.00	19.46	ug/L	-3	20	0.0500	
1,3,5-Trimethylbenzene	2.7424	2.8391	20.00	20.71	ug/L	4	20	0.0500	
2-Chlorotoluene	3.1099	3.1575	20.00	20.31	ug/L	2	20	0.0500	
4-Chlorotoluene	2.6572	2.5853	20.00	19.46	ug/L	-3	20	0.0500	
tert-Butylbenzene	2.1712	1.8204	20.00	16.77	ug/L	-16	20	0.0500	
1,2,4-Trimethylbenzene	2.6384	2.7441	20.00	20.80	ug/L	4	20	0.0500	
sec-Butylbenzene	3.1284	2.6670	20.00	17.05	ug/L	-15	20	0.0500	
para-Isopropyl Toluene	2.4941	2.3643	20.00	18.96	ug/L	-5	20	0.0500	
1,3-Dichlorobenzene	1.6902	1.5907	20.00	18.82	ug/L	-6	20	0.0500	
1,4-Dichlorobenzene	1.6542	1.4979	20.00	18.11	ug/L	-9	20	0.0500	
n-Butylbenzene	2.4331	2.4949	20.00	23.23	ug/L	16	20	0.0500	
1,2-Dichlorobenzene	1.6119	1.5164	20.00	18.82	ug/L	-6	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1759	0.1530	20.00	17.40	ug/L	-13	20	0.0500	
1,2,4-Trichlorobenzene	1.0876	1.0272	20.00	18.89	ug/L	-6	20	0.0500	
Hexachlorobutadiene	0.4373	0.3685	20.00	16.85	ug/L	-16	20	0.0500	
Naphthalene	2.7279	2.6829	20.00	19.67	ug/L	-2	20	0.0500	
1,2,3-Trichlorobenzene	1.0079	0.9464	20.00	18.78	ug/L	-6	20	0.0500	
Dibromofluoromethane	0.4472	0.4681	50.00	52.34	ug/L	5	20	0.0500	
1,2-Dichloroethane-d4	0.3737	0.3401	50.00	45.50	ug/L	-9	20	0.0500	
Toluene-d8	1.4811	1.5309	50.00	51.68	ug/L	3	20	0.0500	
Bromofluorobenzene	1.2424	1.3371	50.00	53.81	ug/L	8	20	0.0500	

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2023195	34.40	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3626419	48.20	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3229199	51.17	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1169850	18.95	17.10	17.10	0.00

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839383527

Date : 09/23/09 Reference : kif12
Sequence : MSVOA11 kin Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
003	CCV/LCS	QC513189	2226782	10.81	3889840	11.74	3378959	14.82	1256121	17.10
005	BLANK	QC513190	2132577	10.81	3778450	11.74	3210002	14.82	953584	17.10
006	MSS	214850-006	2002692	10.81	3617354	11.74	3043560	14.82	856947	17.10
007	SAMPLE	214850-013	2031995	10.81	3616708	11.74	3071354	14.82	956131	17.10
008	SAMPLE	214850-014	1982900	10.81	3568909	11.74	3021933	14.82	840732	17.10
009	SAMPLE	214850-016	1925499	10.81	3473464	11.74	2931260	14.82	804988	17.10
010	SAMPLE	214850-017	1897165	10.81	3442359	11.74	2914080	14.82	861525	17.10
011	SAMPLE	214850-018	1829232	10.81	3321478	11.74	2829066	14.82	825762	17.10
012	SAMPLE	214851-001	1826085	10.81	3315230	11.74	2827611	14.82	839255	17.10
013	SAMPLE	214851-002	1812509	10.81	3311862	11.74	2815286	14.82	812711	17.10
014	SAMPLE	214851-004	1846525	10.81	3369335	11.74	2861907	14.82	860941	17.10
015	SAMPLE	214851-005	1830103	10.81	3337970	11.74	2837522	14.82	814173	17.10
016	SAMPLE	214851-006	1817949	10.81	3323325	11.74	2831016	14.82	804122	17.10
017	SAMPLE	214851-008	1829936	10.81	3335957	11.74	2859424	14.82	836601	17.10
018	SAMPLE	214851-010	1805756	10.81	3299160	11.74	2838816	14.82	852177	17.10
019	SAMPLE	214851-011	1789776	10.81	3253160	11.74	2805719	14.82	816490	17.10
020	SAMPLE	214851-012	1828398	10.81	3342060	11.74	2846250	14.82	818238	17.10
021	SAMPLE	214851-013	1773555	10.81	3259957	11.74	2796479	14.82	795558	17.10
022	SAMPLE	214850-012	1773646	10.81	3234345	11.74	2798061	14.82	767817	17.10
023	SAMPLE	214850-015	1758554	10.81	3229585	11.74	2752065	14.82	734633	17.10
024	SAMPLE	214851-003	1724896	10.82	3166102	11.74	2717615	14.82	780445	17.10
025	SAMPLE	214851-007	1756529	10.81	3206365	11.74	2741897	14.82	745360	17.10
026	MS	QC513213	1799711	10.81	3261225	11.74	2920030	14.82	1079276	17.10
027	MSD	QC513214	1936250	10.81	3504767	11.74	3141293	14.82	1145287	17.10
031	SAMPLE	215108-004	1800948	10.81	3312508	11.74	2846010	14.82	803866	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839384947

Date : 09/24/09 Reference : kif12
Sequence : MSVOA11 kio Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
004	CCV	20PPB	2023195	10.81	3626419	11.74	3229199	14.82	1169850	17.10
005	LCS	QC513420	2112696	10.81	3768449	11.74	3368802	14.82	1210453	17.10
007	BLANK	QC513421	2025084	10.81	3680944	11.74	3203631	14.82	908846	17.10
008	SAMPLE	214846-004	1992125	10.81	3621127	11.74	3128023	14.82	874752	17.10
009	SAMPLE	214923-001	1960707	10.81	3595872	11.74	3134551	14.82	915798	17.10
010	SAMPLE	214925-001	1937366	10.81	3518440	11.74	3052949	14.82	910466	17.10
011	SAMPLE	214925-002	1890776	10.81	3452739	11.74	3021064	14.82	890627	17.10
012	SAMPLE	214925-003	1895761	10.81	3472412	11.74	3042141	14.82	889331	17.10
013	SAMPLE	214851-007	1853075	10.81	3375729	11.74	2944011	14.82	833705	17.10
014	MSS	214851-009	1815418	10.81	3338931	11.74	2907777	14.82	803281	17.10
015	SAMPLE	214851-014	1776925	10.81	3284359	11.74	2836894	14.83	707819	17.10
016	SAMPLE	214851-015	1765596	10.81	3232591	11.74	2839598	14.82	862721	17.10
017	SAMPLE	214851-016	1748290	10.81	3207825	11.74	2819199	14.82	800539	17.10
018	SAMPLE	214851-017	1764402	10.81	3240786	11.74	2833372	14.82	835162	17.10
019	SAMPLE	214923-002	1747667	10.81	3222900	11.74	2824539	14.82	792718	17.10
020	SAMPLE	214923-003	1741349	10.81	3200791	11.74	2808524	14.82	848812	17.10
021	SAMPLE	214923-004	1701028	10.81	3140747	11.74	2771128	14.82	834747	17.10
022	SAMPLE	214923-006	1727967	10.81	3177999	11.74	2796076	14.82	809481	17.10
023	SAMPLE	214923-007	1683834	10.81	3140994	11.74	2732858	14.83	729121	17.10
024	SAMPLE	214923-008	1695791	10.81	3134514	11.74	2779820	14.82	810886	17.10
025	SAMPLE	214923-009	1698480	10.81	3120978	11.74	2773825	14.82	804161	17.10
026	SAMPLE	214923-005	1760216	10.81	3217193	11.74	2851643	14.82	782655	17.10
027	MS	QC513430	1786851	10.81	3276571	11.74	2991541	14.82	1139354	17.10
028	MSD	QC513431	1943151	10.81	3515341	11.74	3201861	14.82	1187919	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839383527

Instrument : MSVOA11 Begun : 09/23/09 08:07
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	kin01	X	IB			09/23/09 08:07	1.0	1
002	kin02	TUN	BFB			09/23/09 08:31	1.0	2
003	kin03	CCV/LCS	QC513189	Water	155193	09/23/09 08:44	1.0	3 4 5 6 1
004	kin04	X	IB			09/23/09 09:20	1.0	1
005	kin05	BLANK	QC513190	Water	155193	09/23/09 09:49	1.0	1
006	kin06	MSS	214850-006	Water	155193	09/23/09 10:17	1.0	1
007	kin07	SAMPLE	214850-013	Water	155193	09/23/09 10:45	1.0	1
008	kin08	SAMPLE	214850-014	Water	155193	09/23/09 11:14	1.0	1
009	kin09	SAMPLE	214850-016	Water	155193	09/23/09 11:42	1.0	1
010	kin10	SAMPLE	214850-017	Water	155193	09/23/09 12:10	1.0	1
011	kin11	SAMPLE	214850-018	Water	155193	09/23/09 12:39	1.0	1
012	kin12	SAMPLE	214851-001	Water	155193	09/23/09 13:07	1.0	1
013	kin13	SAMPLE	214851-002	Water	155193	09/23/09 13:35	1.0	1
014	kin14	SAMPLE	214851-004	Water	155193	09/23/09 14:04	1.0	1
015	kin15	SAMPLE	214851-005	Water	155193	09/23/09 14:32	1.0	1
016	kin16	SAMPLE	214851-006	Water	155193	09/23/09 15:00	1.0	1
017	kin17	SAMPLE	214851-008	Water	155193	09/23/09 15:28	1.0	1
018	kin18	SAMPLE	214851-010	Water	155193	09/23/09 15:57	1.0	1
019	kin19	SAMPLE	214851-011	Water	155193	09/23/09 16:25	1.0	1
020	kin20	SAMPLE	214851-012	Water	155193	09/23/09 16:53	1.0	1
021	kin21	SAMPLE	214851-013	Water	155193	09/23/09 17:22	1.0	1
022	kin22	SAMPLE	214850-012	Water	155193	09/23/09 17:50	1.0	1
023	kin23	SAMPLE	214850-015	Water	155193	09/23/09 18:18	2.0	1
024	kin24	SAMPLE	214851-003	Water	155193	09/23/09 18:47	2.0	1
025	kin25	SAMPLE	214851-007	Water	155193	09/23/09 19:15	5.0	1
026	kin26	MS	QC513213	Water	155193	09/23/09 19:43	1.0	1 3 4 5 6
027	kin27	MSD	QC513214	Water	155193	09/23/09 20:11	1.0	1 3 4 5 6
028	kin28	X	IB			09/23/09 20:40	1.0	1
029	kin29	X	IB			09/23/09 21:08	1.0	1
030	kin30	X	IB			09/23/09 21:36	1.0	1
031	kin31	SAMPLE	215108-004	Water	155198	09/23/09 22:04	1.0	1
032	kin32	X	IB			09/23/09 22:33	1.0	1

BO 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/24/09

Standards used: 1=S12947 2=S12404 3=S12589 4=S12845 5=S12693 6=S12923

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839384947

Instrument : MSVOA11 Begun : 09/24/09 07:47
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kio01	X	IB			09/24/09 07:47	1.0	1	
002	kio02	X	BFB			09/24/09 08:11	1.0	2	
003	kio03	TUN	BFB			09/24/09 08:23	1.0	2	
004	kio04	CCV	20PPB			09/24/09 08:35	1.0	3 4 5 6 1	
005	kio05	LCS	QC513420	Water	155248	09/24/09 09:13	1.0	7 8 9 10 1	
006	kio06	X	IB			09/24/09 09:41	1.0	1	
007	kio07	BLANK	QC513421	Water	155248	09/24/09 10:09	1.0	1	
008	kio08	SAMPLE	214846-004	Water	155248	09/24/09 10:38	1.0	1	
009	kio09	SAMPLE	214923-001	Water	155248	09/24/09 11:06	1.0	1	
010	kio10	SAMPLE	214925-001	Water	155248	09/24/09 11:34	1.0	1	
011	kio11	SAMPLE	214925-002	Water	155248	09/24/09 12:02	1.0	1	
012	kio12	SAMPLE	214925-003	Water	155248	09/24/09 12:30	1.0	1	
013	kio13	SAMPLE	214851-007	Water	155248	09/24/09 12:59	1.0	1	
014	kio14	MSS	214851-009	Water	155248	09/24/09 13:27	1.0	1	
015	kio15	SAMPLE	214851-014	Water	155248	09/24/09 13:55	1.0	1	
016	kio16	SAMPLE	214851-015	Water	155248	09/24/09 14:23	1.0	1	
017	kio17	SAMPLE	214851-016	Water	155248	09/24/09 14:52	1.0	1	
018	kio18	SAMPLE	214851-017	Water	155248	09/24/09 15:20	1.0	1	
019	kio19	SAMPLE	214923-002	Water	155248	09/24/09 15:48	1.0	1	
020	kio20	SAMPLE	214923-003	Water	155248	09/24/09 16:17	1.0	1	
021	kio21	SAMPLE	214923-004	Water	155248	09/24/09 16:45	1.0	1	
022	kio22	SAMPLE	214923-006	Water	155248	09/24/09 17:13	1.0	1	1:TCE=160
023	kio23	SAMPLE	214923-007	Water	155248	09/24/09 17:42	1.0	1	
024	kio24	SAMPLE	214923-008	Water	155248	09/24/09 18:10	1.0	1	
025	kio25	SAMPLE	214923-009	Water	155248	09/24/09 18:38	1.0	1	
026	kio26	SAMPLE	214923-005	Water	155248	09/24/09 19:07	2.0	1	
027	kio27	MS	QC513430	Water	155248	09/24/09 19:35	1.0	1 7 8 9 10	
028	kio28	MSD	QC513431	Water	155248	09/24/09 20:03	1.0	1 7 8 9 10	
029	kio29	X	IB			09/24/09 20:31	1.0	1	
030	kio30	X	IB			09/24/09 21:00	1.0	1	
031	kio31	X	IB			09/24/09 21:28	1.0	1	
032	kio32	X	IB			09/24/09 21:56	1.0	1	
033	kio33	X	IB			09/24/09 22:24	1.0	1	

BO 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

GC/MS VOLATILE ORGANICS

Batch #: 155193

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214850-12	B	<2				11	MM 1x, OP, TCE 75	
2	-6	A						1x MSS	
3	-6	BCD	<2					1x MS/MSD	
4	-13	A						1x	
5	-14								
6	-15		<2			3		2x	
7	-16							1x	
8	-17								
9	-18								
10	214851-1	A						1x	
11	-2							1x	
12	-3		<2			4		2x	
13	-4							1x	
14	-5								
15	-6								
16	-7		<2			5		5x	
17	-8							1x	
18	-10								
19	-11								
20	-12								
21	-13								
22									
23									
24									
25									
26	215108-4	A	<2				11	Storage Blk	
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155248

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments CH2MT4Z	Initials & Date
1	214846-4	C	<2	LV	1		11	MM 1X, B&BT, MTBE 76 on col hold 9/24, due 9/28	
2	214851-9	A			3			1X MSS	
3	-9	BCD						MS/MSD	
4	-14	A							
5	-15								
6	-16								
7	-17								
8	214923-1	A			4			TB	
9	-2							1X	
10	-3								
11	-4								
12	-5		<2			11		2X	
13	-6							1X	
14	-7								
15	-8								
16	-9								
17	214925-1	A			4			TB	
18	-2							1X	
19	-3								
20	-4		Z					PUT OFF	
21	214851-7	C	<2	LV			11	MM 1X, OD	
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214922
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091509B	214922-001
ASE-46B-9C1	214922-002
ASE-23B-9C1	214922-003
PL-201A-9C1	214922-004
ASE-65A-9C1	214922-005
ASE-22B-9C1	214922-006
PL-521-9C1	214922-007
BC-6-9C1	214922-008
ASE-24C-9C1	214922-009
PL-523-9C1	214922-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/30/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214922**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 09/16/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High responses were observed for a number of analytes in the CCV analyzed 09/25/09 10:31; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for tert-butylbenzene and 2-hexanone in the CCV analyzed 09/26/09 15:32; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for n-butylbenzene; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for n-butylbenzene and iodomethane in the LCS for batch 155309; these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for many analytes in the MS/MSD of ASE-46B-9C1 (lab # 214922-002); the associated RPDs were within limits.

Low recovery was observed for vinyl acetate in the LCS for batch 155349. High recoveries were observed for n-butylbenzene and iodomethane; these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for many analytes in the MS/MSD of ASE-76A-9C1 (lab # 214924-008); the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):
No analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):
Low recoveries were observed for calcium in the MS/MSD of ASE-65A-9C1 (lab # 214922-005); the BS/BSD were within limits, and the associated RPD was within

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214922**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

Metals (EPA 6020 and EPA 7470A):
limits.

Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of ASE-65A-9C1 (lab # 214922-005).

High % differences were observed for potassium and molybdenum in the serial dilution for batch 155040 and the serial dilution of ASE-65A-9C1 (lab # 214922-005).

No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
Low recoveries were observed for hexavalent chromium in the MS/MSD of ASE-23B-9C1 (lab # 214922-003); the LCS was within limits, and the associated RPD was within limits.

No other analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Chain of Custody

214922

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell

Text & Excel File Drive — Excel & Text File Order

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Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. Weise - D. Foehr M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	TB	--	--	TB-091509B	9/15/9	0002			TB	1	--	--	X														
2	ASE-48B	--	108	ASE-48B-9C1	9/15/9	0024				9	G	N	X												X		
3	ASE-23B	--	208	ASE-23B-9C1	9/15/9	0300				8	G	N	X		X	X	X	X	X								
4	PL-201A	--	78	PL-201A-9C1	9/15/9	0339				8	G	N	X	X	X	X	X	X	X								
5	ASE-65A	--	97	ASE-65A-9C1	9/15/9	0427				8	G	N	X	X	X	X	X	X	X								
6	ASE-22B	--	141	ASE-22B-9C1	9/15/9	0512				8	G	N	X		X	X	X	X	X								
7	PL-521	--	--	PL-521-9C1	9/15/9	0528			ERB	3	G	N	X														
8	BC-6	--	113	BC-6-9C1	9/15/9	0603				3	G	N	X														
9	ASE-24C	--	178	ASE-24C-9C1	9/15/9	0637				3	G	N	X														
10	PL-523	--	--	PL-523-9C1	9/15/9	0647				3	G	N	X														
11	~~ASE-87A~~	--		~~ASE-87A-9C1~~	~~9/15/09~~	~~0108~~				3	G	N	X														
12																											

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	H+A	09/15/09 17:00		FED EX	09/15/09 17:00	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
					9/16/09 1000	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

214922 Amended 9/18 TN

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2231

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 40000.70632
COC#
Lab Proj # (SDG):
Lab ID
Site ID
Lab Job #
Authorized User: Honeywell

Privileged & Confidential
Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
SDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2635 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: M. Weise - D. Foehr M. Hall
PO #: S101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Petersen

Preservative

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)	MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units															
1	TB	--	--	TB-091509B	9/15/9	0002			TB	1	--	-	X													
2	ASE-488	--	108	ASE-488-9C1	9/15/9	0029				9	G	N	X	Per M Weise loc is ASE-468										X		
3	ASE-23B	--	208	ASE-23B-9C1	9/15/9	0300				8	G	N	X		X	X	X	X	X							
4	PL-201A	--	78	PL-201A-9C1	9/15/9	0339				8	G	N	X	X	X	X	X	X	X							
5	ASE-65A	--	97	ASE-65A-9C1	9/15/9	0427				8	G	N	X	X	X	X	X	X	X							
6	ASE-22B	--	141	ASE-22B-9C1	9/15/9	0512				8	G	N	X		X	X	X	X	X							
7	PL-521	--	--	PL-521-9C1	9/15/9	0528			ERB	3	G	N	X													
8	BC-6	--	113	BC-6-9C1	9/15/9	0603				3	G	N	X													
9	ASE-24C	--	178	ASE-24C-9C1	9/15/9	0637				3	G	N	X													
10	PL-523	--	--	PL-523-9C1	9/15/9	0647				3	G	N	X													
11	~~ASE-97A~~	--		~~ASE-97A-9C1~~	~~9/15/09~~	~~0105~~				~~3~~	~~G~~	~~N~~	~~X~~													
12																										

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	H+A	09/15/09 17:00		FED EX	09/15/09 17:00	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
					9/16/09 900	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 2M922 Date Received 9-16-9 Number of coolers 2
Client HONEYWELL Project QUARTERLY UST

Date Opened 9-16-9 By (print) SEVANS (sign) [signature]
Date Logged in [signature] By (print) [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
   Shipping info MSTR # 8630 5639 5041

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 EA Name Date 9-15-9
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.9, 5

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

TB= 1/1 VOA HAS BUBBLE
SAMPLE #002 ID DOES NOT MATCH COC, LOGGED FOR COC ID.

Laboratory Job Number 214922

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/15/09
Units:	ug/L	Received:	09/16/09
Diln Fac:	1.000	Prepared:	09/18/09
Batch#:	155075		

Field ID:	PL-201A-9C1	Lab ID:	214922-004
Type:	SAMPLE	Analyzed:	09/25/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	93	50-120	

Field ID:	ASE-65A-9C1	Lab ID:	214922-005
Type:	SAMPLE	Analyzed:	09/25/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Type:	BLANK	Analyzed:	09/23/09
Lab ID:	QC512696		

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512697	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,471	99	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-99A-9C1	Batch#:	155075
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Prepared:	09/18/09
Diln Fac:	1.000	Analyzed:	09/23/09

Type: MS Lab ID: QC512698

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	<16.22	2,500	2,452	98	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Type: MSD Lab ID: QC512699

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,407	96	54-120	2	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512700	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,680	107	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626079 File : 264b079 Time : 22-SEP-2009 21:29
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42883	500.0	498.3	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67438	50.00	47.57	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169380626080 File : 264b080 Time : 22-SEP-2009 21:57
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57446	500.0	500.8	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	63359	50.00	44.70	mg/L	-11	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626096 File : 264b096 Time : 23-SEP-2009 05:25
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43307	500.0	503.2	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67479	50.00	47.60	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169380626097 File : 264b097 Time : 23-SEP-2009 05:53
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56996	250.0	248.4	mg/L	-1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	58264	50.00	41.10	mg/L	**-18**	15	c-

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365004 File : 268a004 Time : 25-SEP-2009 08:48
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42856	500.0	498.0	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	66438	50.00	46.87	mg/L	-6	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: JDG Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169386365005 File : 268a005 Time : 25-SEP-2009 09:16
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	51988	500.0	453.2	mg/L	-9	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	52421	50.00	36.98	mg/L	**-26**	15	c-

Analyst: JDG Date: 09/28/09 Reviewer: EAH Date: 09/29/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365021 File : 268a021 Time : 25-SEP-2009 17:20
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43179	500.0	501.7	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67373	50.00	47.53	mg/L	-5	15	

JDG 09/27/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 169386365022 File : 268a022 Time : 25-SEP-2009 17:48
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	59293	1000	1034	mg/L	3	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	64196	50.00	45.29	mg/L	-9	15	

JDG 09/27/09 : Separated from coeluting peak.

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264b001	X	PRIMER				09/21/09 07:46	1.0		
002	264b002	X	IB				09/21/09 08:14	1.0		
003	264b003	X	C8-C50				09/21/09 08:42	1.0	1	
004	264b004	X	DSL_250				09/21/09 09:10	1.0	2	
005	264b005	X	MO_500				09/21/09 09:38	1.0	3	
006	264b006	X	DSL_250				09/21/09 11:34	1.0	2	
007	264b007	X	BUNK_500				09/21/09 12:02	1.0	4	
008	264b008	X	MO_500				09/21/09 12:31	1.0	3	
009	264b009	X	IB				09/21/09 13:57	1.0		
010	264b010	CMARKER	CMARKER				09/21/09 14:25	1.0	1	
011	264b011	CCV	MO_500				09/21/09 14:53	1.0	3	
012	264b012	CCV	DSL_250				09/21/09 15:21	1.0	2	
013	264b013	CCV	BUNK_500				09/21/09 16:17	1.0	4	
014	264b014	BLANK	QC512806	S	Soil	155101	09/21/09 17:05	1.0		
015	264b015	LCS	QC512812	S	Soil	155101	09/21/09 17:33	1.0		
016	264b016	MSS	214977-001	S	Soil	155101	09/21/09 18:01	1.0		
017	264b017	MS	QC512808	S	Soil	155101	09/21/09 18:29	1.0		
018	264b018	MSD	QC512809	S	Soil	155101	09/21/09 18:57	1.0		
019	264b019	MSS	214978-001	S	Soil	155101	09/21/09 19:24	1.0		
020	264b020	MS	QC512810	S	Soil	155101	09/21/09 19:52	1.0		
021	264b021	MSD	QC512811	S	Soil	155101	09/21/09 20:20	1.0		
022	264b022	SAMPLE	214977-003	S	Soil	155101	09/21/09 20:48	5.0		
023	264b023	X	IB				09/21/09 21:16	1.0		
024	264b024	SAMPLE	214977-002	S	Soil	155101	09/21/09 21:44	1.0		
025	264b025	CCV	MO_500				09/21/09 22:11	1.0	3	
026	264b026	CCV	DSL_500				09/21/09 22:39	1.0	5	
027	264b027	CCV	BUNK_500				09/21/09 23:07	1.0	4	
028	264b028	X	CCV				09/21/09 23:35	1.0	3	
029	264b029	X	CCV				09/22/09 00:03	1.0	5	
030	264b030	X	CCV				09/22/09 00:31	1.0	4	
031	264b031	SAMPLE	214977-004	S	Soil	155101	09/22/09 00:58	1.0		
032	264b032	SAMPLE	214977-005	S	Soil	155101	09/22/09 01:26	5.0		
033	264b033	SAMPLE	214977-006	S	Soil	155101	09/22/09 01:54	1.0		
034	264b034	SAMPLE	214977-007	S	Soil	155101	09/22/09 02:22	5.0		
035	264b035	SAMPLE	214977-008	S	Soil	155101	09/22/09 02:49	1.0		
036	264b036	SAMPLE	214978-003	S	Soil	155101	09/22/09 03:17	1.0		
045	264b045	X	CCV				09/22/09 03:47	1.0	3	
046	264b046	X	CCV				09/22/09 04:15	1.0	6	
047	264b047	X	CCV				09/22/09 04:43	1.0	4	
048	264b048	SAMPLE	214978-006	S	Soil	155101	09/22/09 05:11	1.0		
049	264b049	SAMPLE	214978-007	S	Soil	155101	09/22/09 05:39	1.0		
050	264b050	CCV	MO_500				09/22/09 06:07	1.0	3	
051	264b051	CCV	DSL_250				09/22/09 06:35	1.0	2	
052	264b052	CCV	BUNK_500				09/22/09 07:02	1.0	4	
053	264b053	SAMPLE	214978-002	S	Soil	155101	09/22/09 08:01	1.0		
054	264b054	SAMPLE	214978-005	S	Soil	155101	09/22/09 08:29	1.0		
055	264b055	SAMPLE	214978-004	S	Soil	155101	09/22/09 08:56	1.0		
056	264b056	SAMPLE	214978-008	S	Soil	155101	09/22/09 09:24	1.0		
057	264b057	X	IB				09/22/09 10:20	1.0		
058	264b058	SAMPLE	214988-001		Water	155106	09/22/09 10:48	1.0		1:BUNKC:12-40=7000
059	264b059	SAMPLE	214988-002		Water	155106	09/22/09 11:15	1.0		1:BUNKC:12-40=7000
060	264b060	SAMPLE	214990-001		Soil	155134	09/22/09 12:24	3.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B Begun : 09/21/09 07:46
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
061	264b061	SAMPLE	214990-004		Soil	155134	09/22/09 12:57	3.0		
062	264b062	SAMPLE	214990-003		Soil	155134	09/22/09 13:26	3.0		
063	264b063	SAMPLE	214990-005		Soil	155134	09/22/09 13:53	3.0		
064	264b064	CCV	MO_500				09/22/09 14:21	1.0	3	
065	264b065	CCV	DSL_1000				09/22/09 14:49	1.0	6	
066	264b066	CCV	BUNK_500				09/22/09 15:17	1.0	4	
067	264b067	CMARKER	CMARKER				09/22/09 15:45	1.0	1	
068	264b068	MS	QC512808	S	Soil	155101	09/22/09 16:22	1.0		
069	264b069	MSD	QC512809	S	Soil	155101	09/22/09 16:50	1.0		
070	264b070	SAMPLE	215017-005		Water	155106	09/22/09 17:18	2.0		
071	264b071	MSS	214910-001		Soil	155134	09/22/09 17:46	1.0		
072	264b072	SAMPLE	214910-003		Soil	155134	09/22/09 18:14	1.0		
073	264b073	X	IB				09/22/09 18:42	1.0		
074	264b074	SAMPLE	215004-001	S	Water	155106	09/22/09 19:10	1.0		
075	264b075	SAMPLE	214959-010	S	Water	155106	09/22/09 19:38	1.0		
076	264b076	SAMPLE	214910-002		Soil	155134	09/22/09 20:06	1.0		
077	264b077	SAMPLE	214959-005	S	Water	155074	09/22/09 20:34	1.0		
078	264b078	SAMPLE	214959-006	S	Water	155074	09/22/09 21:01	1.0		
079	264b079	CCV	MO_500				09/22/09 21:29	1.0	3	
080	264b080	CCV	DSL_500				09/22/09 21:57	1.0	5	
081	264b081	CCV	BUNK_500				09/22/09 22:25	1.0	4	
082	264b082	X	CCV				09/22/09 22:53	1.0	3	
083	264b083	X	CCV				09/22/09 23:21	1.0	5	
084	264b084	X	CCV				09/22/09 23:50	1.0	4	
085	264b085	SAMPLE	214959-007	S	Water	155074	09/23/09 00:18	1.0		
086	264b086	SAMPLE	214959-008	S	Water	155074	09/23/09 00:46	1.0		
087	264b087	SAMPLE	214959-009	S	Water	155074	09/23/09 01:13	1.0		
088	264b088	BLANK	QC512696		Water	155075	09/23/09 01:41	1.0		
089	264b089	LCS	QC512697		Water	155075	09/23/09 02:09	1.0		
090	264b090	LCS	QC512700		Water	155075	09/23/09 02:37	1.0		
091	264b091	MSS	214851-009		Water	155075	09/23/09 03:05	1.0		
092	264b092	MS	QC512698		Water	155075	09/23/09 03:33	1.0		
093	264b093	MSD	QC512699		Water	155075	09/23/09 04:01	1.0		
094	264b094	SAMPLE	214903-001	S	Water	154973	09/23/09 04:29	1.0		
095	264b095	X	CMARKER				09/23/09 04:57	1.0	1	
096	264b096	CCV	MO_500				09/23/09 05:25	1.0	3	
097	264b097	CCV	DSL_250				09/23/09 05:53	1.0	2	
098	264b098	X	CCV				09/23/09 06:21	1.0	3	
099	264b099	X	CCV				09/23/09 06:49	1.0	2	
100	264b100	X	X			155220	09/24/09 11:01	10.0		

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 52.

JDG 09/22/09 : 37- 44 did not run.

TFB 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 53 through 66.

JDG 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 67 through 99.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

Standards used: 1=S11248 2=S12545 3=S12822 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169386365

Instrument : GC15B Begun : 09/25/09 07:25
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	268a001	X	PRIMER				09/25/09 07:25	1.0		
002	268a002	X	IB				09/25/09 07:53	1.0		
003	268a003	X	CMARKER				09/25/09 08:20	1.0	1	
004	268a004	CCV	MO_500				09/25/09 08:48	1.0	2	
005	268a005	CCV	DSL_500				09/25/09 09:16	1.0	3	
006	268a006	X	QC512558	S	Water	155038	09/25/09 09:44	1.0		
007	268a007	X	QC512559	S	Water	155038	09/25/09 10:12	1.0		
008	268a008	X	QC512560	S	Water	155038	09/25/09 10:40	1.0		
009	268a009	X	QC512561	S	Water	155038	09/25/09 11:07	1.0		
010	268a010	X	QC512562	S	Water	155038	09/25/09 11:35	1.0		
011	268a011	SAMPLE	214922-004		Water	155075	09/25/09 12:40	1.0		
012	268a012	SAMPLE	214922-005		Water	155075	09/25/09 13:08	1.0		
013	268a013	SAMPLE	214923-009		Water	155075	09/25/09 13:36	1.0		
014	268a014	SAMPLE	214924-002		Water	155075	09/25/09 14:04	1.0		
015	268a015	SAMPLE	214925-007		Water	155075	09/25/09 14:31	1.0		
016	268a016	SAMPLE	214925-009		Water	155075	09/25/09 14:59	1.0		
017	268a017	SAMPLE	214925-010		Water	155075	09/25/09 15:27	1.0		
018	268a018	SAMPLE	214980-001		Soil	155270	09/25/09 15:55	1.0		
019	268a019	SAMPLE	214980-004		Soil	155270	09/25/09 16:23	1.0		
020	268a020	SAMPLE	214980-005		Soil	155270	09/25/09 16:52	1.0		
021	268a021	CCV	MO_500				09/25/09 17:20	1.0	2	
022	268a022	CCV	DSL_1000				09/25/09 17:48	1.0	4	
023	268a023	X	CCV				09/25/09 18:16	1.0	2	
024	268a024	X	CCV				09/25/09 18:44	1.0	4	
025	268a025	BLANK	QC513372		Water	155238	09/25/09 19:12	1.0		
026	268a026	SAMPLE	215034-001		Water	155238	09/25/09 19:40	1.0		
027	268a027	SAMPLE	215034-002		Water	155238	09/25/09 20:07	1.0		
028	268a028	SAMPLE	215034-003		Water	155238	09/25/09 20:35	1.0		
029	268a029	SAMPLE	215034-004		Water	155238	09/25/09 21:03	1.0		
030	268a030	SAMPLE	215034-005		Water	155238	09/25/09 21:31	1.0		
031	268a031	SAMPLE	215034-006		Water	155238	09/25/09 21:58	1.0		
032	268a032	SAMPLE	215034-007		Water	155238	09/25/09 22:26	1.0		
033	268a033	SAMPLE	215034-008		Water	155238	09/25/09 22:54	1.0		
034	268a034	SAMPLE	215118-001		Water	155238	09/25/09 23:22	1.0		
035	268a035	X	CMARKER				09/25/09 23:49	1.0	5	
036	268a036	CCV	DSL_500				09/26/09 00:16	1.0	3	
037	268a037	CCV	MO_500				09/26/09 00:43	1.0	2	
038	268a038	X	CCV				09/26/09 01:11	1.0	3	
039	268a039	X	CCV				09/26/09 01:39	1.0	2	

JDG 09/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S11248 2=S12822 3=S12546 4=S12547 5=S11825

SAMPLE PREPARATION SUMMARY

Batch # : 155075 Analysis : TEH
Started By : SFL Prep Date : 18-SEP-2009 16:45 Finished By : SFL
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12972 Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214851-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-009		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
214851-010		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-011		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-012		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-013		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-014		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-015		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-016		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-017		Water	500	2.5	1	0.005	7	.5				TEHM	
214881-001		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214923-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214924-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-010		Water	500	2.5	1	0.005	7	.5				TEHM	
QC512696	BLANK	Water	500	2.5	1	0.005		.5					
QC512697	LCS	Water	500	2.5	1	0.005		.5	.5				
QC512698	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC512699	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC512700	LCS	Water	500	2.5	1	0.005		.5		.5			

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

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LIMS Batch No: 155075
LIMS Analysis: TEH
Date Extracted: 9/18/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☐ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214851-003	D	500	7	2.5		
5	E					
9	L					MSS
10	D					
11						
12						
13						
14						
15						
16						
17						
214881-001						
214922-004	I					
05						
214923-009	D					
214924-002	H					
214925-007	D					
9						
10						
MB BLC9/20/09						
LCS 97						
MS 98	K		7			
MSD 99						
LCS 100						MO *

SFL 9/20/09

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129348	SFL 9/18/09
0.5/0.5X mL of TEH_SP was added to all spikes	S129728/S122900	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F0093334	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1645	
Extraction End Time:	12:25	SDD 9/19/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SFL 9/20/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49001904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/18/09

Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

9/21/09

Reviewed by **Date**

Laboratory Job Number 214922

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091509B	Batch#:	155309
Lab ID:	214922-001	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091509B	Batch#:	155309
Lab ID:	214922-001	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	113	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	M1 V1
Chloromethane	ND	1.0	M1
Vinyl Chloride	1.4	0.5	M1
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	M1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 M1 V1
Acetone	ND	10	
1,1-Dichloroethene	0.5	0.5	
Methylene Chloride	ND	10	M1
Carbon Disulfide	ND	0.5	M1
MTBE	4.5	0.5	M1
trans-1,2-Dichloroethene	ND	0.5	M1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	9.0	0.5	M1
2-Butanone	ND	10	
cis-1,2-Dichloroethene	2.0	0.5	M1
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	M1
Bromochloromethane	ND	0.5	M1
1,1,1-Trichloroethane	ND	0.5	M1
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	M1
Trichloroethene	5.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	M1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	M1
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	M1
2-Chlorotoluene	ND	0.5	M1
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	M1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 M1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	M1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	113	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-23B-9C1	Batch#:	155349
Lab ID:	214922-003	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	1.4	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	28	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	13	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	34	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	80	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-23B-9C1	Batch#:	155349
Lab ID:	214922-003	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-201A-9C1	Batch#:	155349
Lab ID:	214922-004	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	5.5	0.5	
Bromomethane	ND	1.0	
Chloroethane	5.0	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	26	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	71	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.1	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	4.9	0.5	
Trichloroethene	1.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-201A-9C1	Batch#:	155349
Lab ID:	214922-004	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-65A-9C1	Batch#:	155349
Lab ID:	214922-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	1.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.3	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-65A-9C1	Batch#:	155349
Lab ID:	214922-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	107	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22B-9C1	Batch#:	155309
Lab ID:	214922-006	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	4.0	D2 V1
Chloromethane	ND	4.0	D2
Vinyl Chloride	ND	2.0	D2
Bromomethane	ND	4.0	D2 V1
Chloroethane	ND	4.0	D2
Trichlorofluoromethane	ND	4.0	D2
Iodomethane	ND	40	D2 L1 V1
Acetone	ND	40	D2
1,1-Dichloroethene	66	2.0	D2
Methylene Chloride	ND	40	D2
Carbon Disulfide	ND	2.0	D2
MTBE	ND	2.0	D2
trans-1,2-Dichloroethene	ND	2.0	D2
Vinyl Acetate	ND	40	D2
1,1-Dichloroethane	29	2.0	D2
2-Butanone	ND	40	D2
cis-1,2-Dichloroethene	36	2.0	D2
2,2-Dichloropropane	ND	2.0	D2
Chloroform	ND	2.0	D2
Bromochloromethane	ND	2.0	D2
1,1,1-Trichloroethane	ND	2.0	D2
1,1-Dichloropropene	ND	2.0	D2
Carbon Tetrachloride	ND	2.0	D2
1,2-Dichloroethane	ND	2.0	D2
Benzene	ND	2.0	D2
Trichloroethene	200	2.0	D2
1,2-Dichloropropane	ND	2.0	D2
Bromodichloromethane	ND	2.0	D2
Dibromomethane	ND	2.0	D2
4-Methyl-2-Pentanone	ND	40	D2
cis-1,3-Dichloropropene	ND	2.0	D2
Toluene	ND	2.0	D2
trans-1,3-Dichloropropene	ND	2.0	D2
1,1,2-Trichloroethane	ND	2.0	D2
2-Hexanone	ND	40	D2
1,3-Dichloropropane	ND	2.0	D2
Tetrachloroethene	2.3	2.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22B-9C1	Batch#:	155309
Lab ID:	214922-006	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	2.0	D2
1,2-Dibromoethane	ND	2.0	D2
Chlorobenzene	ND	2.0	D2
1,1,1,2-Tetrachloroethane	ND	2.0	D2
Ethylbenzene	ND	2.0	D2
m,p-Xylenes	ND	2.0	D2
o-Xylene	ND	2.0	D2
Styrene	ND	2.0	D2
Bromoform	ND	4.0	D2
Isopropylbenzene	ND	2.0	D2
1,1,2,2-Tetrachloroethane	ND	2.0	D2
1,2,3-Trichloropropane	ND	2.0	D2
Propylbenzene	ND	2.0	D2
Bromobenzene	ND	2.0	D2
1,3,5-Trimethylbenzene	ND	2.0	D2
2-Chlorotoluene	ND	2.0	D2
4-Chlorotoluene	ND	2.0	D2
tert-Butylbenzene	ND	2.0	D2
1,2,4-Trimethylbenzene	ND	2.0	D2
sec-Butylbenzene	ND	2.0	D2
para-Isopropyl Toluene	ND	2.0	D2
1,3-Dichlorobenzene	ND	2.0	D2
1,4-Dichlorobenzene	ND	2.0	D2
n-Butylbenzene	ND	2.0	D2 L1 V1
1,2-Dichlorobenzene	ND	2.0	D2
1,2-Dibromo-3-Chloropropane	ND	8.0	D2
1,2,4-Trichlorobenzene	ND	2.0	D2
Hexachlorobutadiene	ND	8.0	D2
Naphthalene	ND	8.0	D2
1,2,3-Trichlorobenzene	ND	2.0	D2
Xylene (total)	ND	2.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-521-9C1	Batch#:	155349
Lab ID:	214922-007	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	69	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-521-9C1	Batch#:	155349
Lab ID:	214922-007	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	109	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-6-9C1	Batch#:	155349
Lab ID:	214922-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	0.8	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	2.6	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	5.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.7	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	8.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-6-9C1	Batch#:	155349
Lab ID:	214922-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	110	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-24C-9C1	Batch#:	155349
Lab ID:	214922-009	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	0.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	26	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-24C-9C1	Batch#:	155349
Lab ID:	214922-009	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-523-9C1	Batch#:	155349
Lab ID:	214922-010	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	0.9	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	27	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-523-9C1	Batch#:	155349
Lab ID:	214922-010	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	105	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513643	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	32.79 b	131	56-140	V3
Chloromethane	25.00	28.19	113	46-142	
Vinyl Chloride	25.00	29.81	119	49-136	
Bromomethane	25.00	32.65 b	131	42-154	V3
Chloroethane	25.00	28.76	115	51-133	
Trichlorofluoromethane	25.00	27.30	109	63-135	
Iodomethane	25.00	35.57 b	142 *	70-130	L1 V3
Acetone	25.00	27.07	108	48-130	
1,1-Dichloroethene	25.00	27.97	112	68-133	
Methylene Chloride	25.00	28.04	112	71-120	
Carbon Disulfide	25.00	26.65	107	56-120	
MTBE	25.00	26.20	105	58-120	
trans-1,2-Dichloroethene	25.00	29.92	120	80-120	
Vinyl Acetate	25.00	23.23	93	63-124	
1,1-Dichloroethane	25.00	27.79	111	77-120	
2-Butanone	25.00	25.44	102	57-120	
cis-1,2-Dichloroethene	25.00	28.57	114	75-120	
2,2-Dichloropropane	25.00	27.74	111	72-128	
Chloroform	25.00	25.83	103	78-120	
Bromochloromethane	25.00	28.27	113	78-120	
1,1,1-Trichloroethane	25.00	26.21	105	78-120	
1,1-Dichloropropene	25.00	25.43	102	75-120	
Carbon Tetrachloride	25.00	23.59	94	80-120	
1,2-Dichloroethane	25.00	23.02	92	74-120	
Benzene	25.00	27.14	109	77-120	
Trichloroethene	25.00	26.80	107	78-122	
1,2-Dichloropropane	25.00	25.75	103	76-120	
Bromodichloromethane	25.00	25.59	102	78-120	
Dibromomethane	25.00	25.33	101	77-120	
4-Methyl-2-Pentanone	25.00	21.59	86	65-120	
cis-1,3-Dichloropropene	25.00	27.70	111	76-120	
Toluene	25.00	25.40	102	73-120	
trans-1,3-Dichloropropene	25.00	23.29	93	72-120	
1,1,2-Trichloroethane	25.00	25.65	103	76-120	
2-Hexanone	25.00	21.73	87	57-121	
1,3-Dichloropropane	25.00	25.44	102	75-120	
Tetrachloroethene	25.00	23.52	94	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513643	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.52	98	76-120	
1,2-Dibromoethane	25.00	25.08	100	77-120	
Chlorobenzene	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.18	97	77-120	
Ethylbenzene	25.00	25.71	103	78-120	
m,p-Xylenes	50.00	51.49	103	77-120	
o-Xylene	25.00	24.86	99	77-120	
Styrene	25.00	25.89	104	77-120	
Bromoform	25.00	22.75	91	74-121	
Isopropylbenzene	25.00	24.11	96	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.25	101	73-120	
1,2,3-Trichloropropane	25.00	28.32	113	72-120	
Propylbenzene	25.00	25.60	102	76-120	
Bromobenzene	25.00	26.67	107	75-120	
1,3,5-Trimethylbenzene	25.00	28.19	113	77-120	
2-Chlorotoluene	25.00	27.97	112	76-120	
4-Chlorotoluene	25.00	26.72	107	78-120	
tert-Butylbenzene	25.00	22.84	91	76-120	
1,2,4-Trimethylbenzene	25.00	28.79	115	77-120	
sec-Butylbenzene	25.00	22.67	91	80-120	
para-Isopropyl Toluene	25.00	24.58	98	76-120	
1,3-Dichlorobenzene	25.00	25.74	103	75-120	
1,4-Dichlorobenzene	25.00	25.06	100	77-120	
n-Butylbenzene	25.00	35.59 b	142 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.77	103	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.05	100	65-120	
1,2,4-Trichlorobenzene	25.00	25.99	104	73-121	
Hexachlorobutadiene	25.00	21.70	87	73-123	
Naphthalene	25.00	29.17	117	62-121	
1,2,3-Trichlorobenzene	25.00	27.18	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	107	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513644	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513644	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513653

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	37.28 b	149 *	56-140	M1 V3
Chloromethane	<0.2000	25.00	37.53	150 *	46-142	M1
Vinyl Chloride	1.384	25.00	38.20	147 *	49-136	M1
Bromomethane	<0.2000	25.00	35.89 b	144	42-154	V3
Chloroethane	<0.2000	25.00	33.77	135 *	51-133	M1
Trichlorofluoromethane	<0.2000	25.00	32.00	128	63-135	
Iodomethane	<2.000	25.00	38.41 b	154 *	60-140	M1 V3
Acetone	<1.000	25.00	28.85	115	48-130	
1,1-Dichloroethene	0.5104	25.00	32.67	129	68-133	
Methylene Chloride	0.1794	25.00	31.95	127 *	71-120	M1
Carbon Disulfide	<0.1000	25.00	31.55	126 *	56-120	M1
MTBE	4.524	25.00	35.52	124 *	58-120	M1
trans-1,2-Dichloroethene	<0.1000	25.00	34.28	137 *	80-120	M1
Vinyl Acetate	<2.000	25.00	25.58	102	63-124	
1,1-Dichloroethane	8.970	25.00	43.19	137 *	77-120	M1
2-Butanone	<2.000	25.00	30.05	120	57-120	
cis-1,2-Dichloroethene	1.967	25.00	34.27	129 *	75-120	M1
2,2-Dichloropropane	<0.1000	25.00	30.58	122	72-128	
Chloroform	0.2213	25.00	31.78	126 *	78-120	M1
Bromochloromethane	<0.1000	25.00	31.76	127 *	78-120	M1
1,1,1-Trichloroethane	<0.1131	25.00	33.46	134 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	30.02	120	75-120	
Carbon Tetrachloride	<0.1000	25.00	28.49	114	80-120	
1,2-Dichloroethane	<0.1000	25.00	28.46	114	74-120	
Benzene	<0.1000	25.00	30.68	123 *	77-120	M1
Trichloroethene	5.707	25.00	35.48	119	78-122	
1,2-Dichloropropane	<0.1000	25.00	29.60	118	76-120	
Bromodichloromethane	<0.1000	25.00	29.55	118	78-120	
Dibromomethane	<0.1000	25.00	27.92	112	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	24.57	98	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	30.17	121 *	76-120	M1
Toluene	<0.1000	25.00	26.99	108	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	24.78	99	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	28.16	113	76-120	
2-Hexanone	<2.000	25.00	21.41	86	57-121	
1,3-Dichloropropane	<0.1000	25.00	27.92	112	75-120	
Tetrachloroethene	0.2248	25.00	24.87	99	77-120	
Dibromochloromethane	<0.1000	25.00	25.99	104	76-120	
1,2-Dibromoethane	<0.1000	25.00	26.03	104	77-120	
Chlorobenzene	<0.1000	25.00	26.31	105	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	26.03	104	77-120	
Ethylbenzene	<0.1000	25.00	28.12	112	78-120	
m,p-Xylenes	<0.1594	50.00	53.64	107	77-120	
o-Xylene	<0.1000	25.00	25.92	104	77-120	
Styrene	<0.1000	25.00	26.66	107	77-120	
Bromoform	<0.2000	25.00	23.38	94	74-121	
Isopropylbenzene	<0.1000	25.00	25.58	102	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	27.93	112	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	31.07	124 *	72-120	M1
Propylbenzene	<0.1000	25.00	27.28	109	76-120	
Bromobenzene	<0.1000	25.00	27.60	110	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	30.44	122 *	77-120	M1
2-Chlorotoluene	<0.1000	25.00	30.20	121 *	76-120	M1
4-Chlorotoluene	<0.1000	25.00	28.09	112	78-120	
tert-Butylbenzene	<0.1000	25.00	23.93	96	76-120	
1,2,4-Trimethylbenzene	0.1004	25.00	31.62	126 *	77-120	M1
sec-Butylbenzene	<0.1029	25.00	24.51	98	80-120	
para-Isopropyl Toluene	<0.1000	25.00	26.92	108	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	26.33	105	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	25.48	102	77-120	
n-Butylbenzene	<0.1285	25.00	41.24 b	165 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	26.63	107	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	27.02	108	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	27.09	108	73-121	
Hexachlorobutadiene	<0.4000	25.00	23.22	93	73-123	
Naphthalene	<0.4000	25.00	30.87	123 *	62-121	M1
1,2,3-Trichlorobenzene	<0.1149	25.00	28.56	114	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	110	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513654

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	32.90 b	132	56-140	12	24	V3
Chloromethane	25.00	32.52	130	46-142	14	24	
Vinyl Chloride	25.00	33.30	128	49-136	14	24	
Bromomethane	25.00	32.65 b	131	42-154	9	24	V3
Chloroethane	25.00	29.11	116	51-133	15	25	
Trichlorofluoromethane	25.00	27.04	108	63-135	17	20	
Iodomethane	25.00	34.41 b	138	60-140	11	30	V3
Acetone	25.00	27.05	108	48-130	6	41	
1,1-Dichloroethene	25.00	27.64	109	68-133	17	20	
Methylene Chloride	25.00	27.74	110	71-120	14	20	
Carbon Disulfide	25.00	26.46	106	56-120	18	20	
MTBE	25.00	32.36	111	58-120	9	21	
trans-1,2-Dichloroethene	25.00	29.14	117	80-120	16	24	
Vinyl Acetate	25.00	22.04	88	63-124	15	24	
1,1-Dichloroethane	25.00	36.59	110	77-120	17	20	
2-Butanone	25.00	25.98	104	57-120	15	32	
cis-1,2-Dichloroethene	25.00	29.50	110	75-120	15	20	
2,2-Dichloropropane	25.00	25.17	101	72-128	19	24	
Chloroform	25.00	26.65	106	78-120	18	20	
Bromochloromethane	25.00	27.41	110	78-120	15	20	
1,1,1-Trichloroethane	25.00	28.16	113	78-120	17	20	
1,1-Dichloropropene	25.00	25.20	101	75-120	17	21	
Carbon Tetrachloride	25.00	23.84	95	80-120	18	21	
1,2-Dichloroethane	25.00	24.06	96	74-120	17	20	
Benzene	25.00	25.97	104	77-120	17	20	
Trichloroethene	25.00	30.85	101	78-122	14	20	
1,2-Dichloropropane	25.00	25.26	101	76-120	16	20	
Bromodichloromethane	25.00	25.03	100	78-120	17	20	
Dibromomethane	25.00	24.49	98	77-120	13	20	
4-Methyl-2-Pentanone	25.00	22.19	89	65-120	10	22	
cis-1,3-Dichloropropene	25.00	26.13	105	76-120	14	20	
Toluene	25.00	23.12	92	73-120	15	20	
trans-1,3-Dichloropropene	25.00	21.54	86	72-120	14	20	
1,1,2-Trichloroethane	25.00	24.26	97	76-120	15	20	
2-Hexanone	25.00	19.45	78	57-121	10	25	
1,3-Dichloropropane	25.00	24.58	98	75-120	13	20	
Tetrachloroethene	25.00	21.32	84	77-120	15	20	
Dibromochloromethane	25.00	22.89	92	76-120	13	20	
1,2-Dibromoethane	25.00	23.38	94	77-120	11	20	
Chlorobenzene	25.00	22.74	91	78-120	15	20	
1,1,1,2-Tetrachloroethane	25.00	22.31	89	77-120	15	20	
Ethylbenzene	25.00	23.92	96	78-120	16	26	
m,p-Xylenes	50.00	45.00	90	77-120	18	20	
o-Xylene	25.00	21.82	87	77-120	17	20	
Styrene	25.00	22.43	90	77-120	17	20	
Bromoform	25.00	20.95	84	74-121	11	21	
Isopropylbenzene	25.00	22.16	89	71-120	14	20	
1,1,2,2-Tetrachloroethane	25.00	25.82	103	73-120	8	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	28.67	115	72-120	8	20	
Propylbenzene	25.00	23.14	93	76-120	16	20	
Bromobenzene	25.00	24.68	99	75-120	11	20	
1,3,5-Trimethylbenzene	25.00	26.51	106	77-120	14	20	
2-Chlorotoluene	25.00	26.13	105	76-120	14	20	
4-Chlorotoluene	25.00	24.14	97	78-120	15	20	
tert-Butylbenzene	25.00	20.54	82	76-120	15	21	
1,2,4-Trimethylbenzene	25.00	27.87	111	77-120	13	20	
sec-Butylbenzene	25.00	21.12	84	80-120	15	21	
para-Isopropyl Toluene	25.00	23.46	94	76-120	14	20	
1,3-Dichlorobenzene	25.00	22.75	91	75-120	15	20	
1,4-Dichlorobenzene	25.00	22.26	89	77-120	13	23	
n-Butylbenzene	25.00	33.82 b	135 *	76-120	20	21	M1 V3
1,2-Dichlorobenzene	25.00	23.46	94	76-120	13	20	
1,2-Dibromo-3-Chloropropane	25.00	24.54	98	65-120	10	22	
1,2,4-Trichlorobenzene	25.00	24.37	97	73-121	11	20	
Hexachlorobutadiene	25.00	20.62	82	73-123	12	25	
Naphthalene	25.00	28.71	115	62-121	7	32	
1,2,3-Trichlorobenzene	25.00	26.11	104	66-123	9	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	112	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513820	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513820	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513821	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	21.25	24.52	115	56-140	
Chloromethane	21.25	20.02	94	46-142	
Vinyl Chloride	21.25	20.30	96	49-136	
Bromomethane	21.25	25.47	120	42-154	
Chloroethane	21.25	21.50	101	51-133	
Trichlorofluoromethane	21.25	20.32	96	63-135	
Iodomethane	21.25	29.77	140 *	70-130	L1
Acetone	21.25	21.36	100	48-130	
1,1-Dichloroethene	21.25	22.47	106	68-133	
Methylene Chloride	21.25	21.68	102	71-120	
Carbon Disulfide	21.25	20.77	98	56-120	
MTBE	21.25	20.92	98	58-120	
trans-1,2-Dichloroethene	21.25	23.23	109	80-120	
Vinyl Acetate	21.25	12.46	59 *	63-124	L2
1,1-Dichloroethane	21.25	21.60	102	77-120	
2-Butanone	21.25	20.28	95	57-120	
cis-1,2-Dichloroethene	21.25	22.01	104	75-120	
2,2-Dichloropropane	21.25	19.48	92	72-128	
Chloroform	21.25	20.27	95	78-120	
Bromochloromethane	21.25	22.11	104	78-120	
1,1,1-Trichloroethane	21.25	21.71	102	78-120	
1,1-Dichloropropene	21.25	20.22	95	75-120	
Carbon Tetrachloride	21.25	19.34	91	80-120	
1,2-Dichloroethane	21.25	18.30	86	74-120	
Benzene	21.25	20.72	97	77-120	
Trichloroethene	21.25	21.97	103	78-122	
1,2-Dichloropropane	21.25	20.04	94	76-120	
Bromodichloromethane	21.25	19.99	94	78-120	
Dibromomethane	21.25	19.98	94	77-120	
4-Methyl-2-Pentanone	21.25	17.17	81	65-120	
cis-1,3-Dichloropropene	21.25	21.19	100	76-120	
Toluene	21.25	19.20	90	73-120	
trans-1,3-Dichloropropene	21.25	17.49	82	72-120	
1,1,2-Trichloroethane	21.25	20.10	95	76-120	
2-Hexanone	21.25	16.24 b	76	57-121	V9
1,3-Dichloropropane	21.25	19.84	93	75-120	
Tetrachloroethene	21.25	18.69	88	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513821	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	21.25	18.94	89	76-120	
1,2-Dibromoethane	21.25	19.69	93	77-120	
Chlorobenzene	21.25	18.89	89	78-120	
1,1,1,2-Tetrachloroethane	21.25	18.50	87	77-120	
Ethylbenzene	21.25	19.37	91	78-120	
m,p-Xylenes	42.50	37.72	89	77-120	
o-Xylene	21.25	18.18	86	77-120	
Styrene	21.25	18.47	87	77-120	
Bromoform	21.25	17.72	83	74-121	
Isopropylbenzene	21.25	18.75	88	71-120	
1,1,2,2-Tetrachloroethane	21.25	19.45	92	73-120	
1,2,3-Trichloropropane	21.25	23.38	110	72-120	
Propylbenzene	21.25	19.15	90	76-120	
Bromobenzene	21.25	21.22	100	75-120	
1,3,5-Trimethylbenzene	21.25	23.09	109	77-120	
2-Chlorotoluene	21.25	21.70	102	76-120	
4-Chlorotoluene	21.25	19.95	94	78-120	
tert-Butylbenzene	21.25	17.34 b	82	76-120	V9
1,2,4-Trimethylbenzene	21.25	24.15	114	77-120	
sec-Butylbenzene	21.25	17.85	84	80-120	
para-Isopropyl Toluene	21.25	20.81	98	76-120	
1,3-Dichlorobenzene	21.25	19.57	92	75-120	
1,4-Dichlorobenzene	21.25	18.79	88	77-120	
n-Butylbenzene	21.25	29.05 b	137 *	76-120	L1 V3
1,2-Dichlorobenzene	21.25	20.01	94	76-120	
1,2-Dibromo-3-Chloropropane	21.25	20.02	94	65-120	
1,2,4-Trichlorobenzene	21.25	21.43	101	73-121	
Hexachlorobutadiene	21.25	18.29	86	73-123	
Naphthalene	21.25	24.71	116	62-121	
1,2,3-Trichlorobenzene	21.25	22.66	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	89	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513822

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	35.81	143 *	56-140	M1
Chloromethane	<0.2000	25.00	29.99	120	46-142	
Vinyl Chloride	<0.1000	25.00	30.20	121	49-136	
Bromomethane	<0.2000	25.00	33.66	135	42-154	
Chloroethane	<0.2000	25.00	30.90	124	51-133	
Trichlorofluoromethane	<0.2000	25.00	30.63	123	63-135	
Iodomethane	<2.000	25.00	38.06	152 *	60-140	M1
Acetone	<1.000	25.00	26.98	108	48-130	
1,1-Dichloroethene	1.287	25.00	32.06	123	68-133	
Methylene Chloride	0.1569	25.00	28.79	115	71-120	
Carbon Disulfide	<0.1000	25.00	29.08	116	56-120	
MTBE	<0.1000	25.00	27.86	111	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	31.53	126 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.78	83	63-124	
1,1-Dichloroethane	0.9899	25.00	30.97	120	77-120	
2-Butanone	<2.000	25.00	25.41	102	57-120	
cis-1,2-Dichloroethene	0.2039	25.00	29.22	116	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.10	108	72-128	
Chloroform	0.3681	25.00	28.38	112	78-120	
Bromochloromethane	<0.1000	25.00	29.53	118	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	31.00	124 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	28.03	112	75-120	
Carbon Tetrachloride	<0.1000	25.00	27.52	110	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.12	100	74-120	
Benzene	<0.1000	25.00	27.56	110	77-120	
Trichloroethene	0.9793	25.00	29.45	114	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.30	105	76-120	
Bromodichloromethane	0.1105	25.00	27.10	108	78-120	
Dibromomethane	<0.1000	25.00	25.97	104	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.90	88	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	27.65	111	76-120	
Toluene	<0.1000	25.00	24.84	99	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	22.30	89	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.32	101	76-120	
2-Hexanone	<2.000	25.00	18.55 b	74	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.44	102	75-120	
Tetrachloroethene	0.2454	25.00	24.17	96	77-120	
Dibromochloromethane	<0.1000	25.00	24.19	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.34	97	77-120	
Chlorobenzene	<0.1000	25.00	23.98	96	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	23.91	96	77-120	
Ethylbenzene	<0.1000	25.00	25.42	102	78-120	
m,p-Xylenes	<0.1594	50.00	48.12	96	77-120	
o-Xylene	<0.1000	25.00	23.08	92	77-120	
Styrene	<0.1000	25.00	22.53	90	77-120	
Bromoform	<0.2000	25.00	21.93	88	74-121	
Isopropylbenzene	<0.1000	25.00	23.47	94	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.50	102	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	29.35	117	72-120	
Propylbenzene	<0.1000	25.00	24.41	98	76-120	
Bromobenzene	<0.1000	25.00	25.89	104	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	29.44	118	77-120	
2-Chlorotoluene	<0.1000	25.00	27.61	110	76-120	
4-Chlorotoluene	<0.1000	25.00	25.17	101	78-120	
tert-Butylbenzene	<0.1000	25.00	22.17 b	89	76-120	V9
1,2,4-Trimethylbenzene	<0.1000	25.00	30.24	121 *	77-120	M1
sec-Butylbenzene	<0.1029	25.00	23.63	95	80-120	
para-Isopropyl Toluene	<0.1000	25.00	27.06	108	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.15	97	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	23.35	93	77-120	
n-Butylbenzene	<0.1285	25.00	40.51 b	162 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	24.56	98	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.86	99	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	26.29	105	73-121	
Hexachlorobutadiene	<0.4000	25.00	24.57	98	73-123	
Naphthalene	<0.4000	25.00	29.87	119	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	27.97	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513823

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	33.88	136	56-140	6	24	
Chloromethane	25.00	29.12	116	46-142	3	24	
Vinyl Chloride	25.00	28.75	115	49-136	5	24	
Bromomethane	25.00	33.61	134	42-154	0	24	
Chloroethane	25.00	28.29	113	51-133	9	25	
Trichlorofluoromethane	25.00	27.70	111	63-135	10	20	
Iodomethane	25.00	38.44	154 *	60-140	1	30	M1
Acetone	25.00	25.45	102	48-130	6	41	
1,1-Dichloroethene	25.00	29.72	114	68-133	8	20	
Methylene Chloride	25.00	27.75	110	71-120	4	20	
Carbon Disulfide	25.00	26.74	107	56-120	8	20	
MTBE	25.00	26.71	107	58-120	4	21	
trans-1,2-Dichloroethene	25.00	29.53	118	80-120	7	24	
Vinyl Acetate	25.00	19.93	80	63-124	4	24	
1,1-Dichloroethane	25.00	28.77	111	77-120	7	20	
2-Butanone	25.00	24.05	96	57-120	5	32	
cis-1,2-Dichloroethene	25.00	27.46	109	75-120	6	20	
2,2-Dichloropropane	25.00	24.76	99	72-128	9	24	
Chloroform	25.00	26.48	104	78-120	7	20	
Bromochloromethane	25.00	28.31	113	78-120	4	20	
1,1,1-Trichloroethane	25.00	28.58	114	78-120	8	20	
1,1-Dichloropropene	25.00	26.22	105	75-120	7	21	
Carbon Tetrachloride	25.00	25.46	102	80-120	8	21	
1,2-Dichloroethane	25.00	24.12	96	74-120	4	20	
Benzene	25.00	26.10	104	77-120	5	20	
Trichloroethene	25.00	27.57	106	78-122	7	20	
1,2-Dichloropropane	25.00	25.38	102	76-120	4	20	
Bromodichloromethane	25.00	25.86	103	78-120	5	20	
Dibromomethane	25.00	24.91	100	77-120	4	20	
4-Methyl-2-Pentanone	25.00	21.22	85	65-120	3	22	
cis-1,3-Dichloropropene	25.00	26.68	107	76-120	4	20	
Toluene	25.00	23.45	94	73-120	6	20	
trans-1,3-Dichloropropene	25.00	21.48	86	72-120	4	20	
1,1,2-Trichloroethane	25.00	24.47	98	76-120	3	20	
2-Hexanone	25.00	18.44 b	74	57-121	1	25	V9
1,3-Dichloropropane	25.00	24.57	98	75-120	3	20	
Tetrachloroethene	25.00	22.84	90	77-120	6	20	
Dibromochloromethane	25.00	23.59	94	76-120	2	20	
1,2-Dibromoethane	25.00	23.54	94	77-120	3	20	
Chlorobenzene	25.00	23.32	93	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	22.92	92	77-120	4	20	
Ethylbenzene	25.00	24.15	97	78-120	5	26	
m,p-Xylenes	50.00	45.36	91	77-120	6	20	
o-Xylene	25.00	21.72	87	77-120	6	20	
Styrene	25.00	21.26	85	77-120	6	20	
Bromoform	25.00	21.59	86	74-121	2	21	
Isopropylbenzene	25.00	23.07	92	71-120	2	20	
1,1,2,2-Tetrachloroethane	25.00	26.45	106	73-120	4	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	29.83	119	72-120	2	20	
Propylbenzene	25.00	23.32	93	76-120	5	20	
Bromobenzene	25.00	26.68	107	75-120	3	20	
1,3,5-Trimethylbenzene	25.00	29.16	117	77-120	1	20	
2-Chlorotoluene	25.00	26.97	108	76-120	2	20	
4-Chlorotoluene	25.00	24.51	98	78-120	3	20	
tert-Butylbenzene	25.00	21.17 b	85	76-120	5	21	V9
1,2,4-Trimethylbenzene	25.00	30.33	121 *	77-120	0	20	M1
sec-Butylbenzene	25.00	22.57	90	80-120	5	21	
para-Isopropyl Toluene	25.00	26.65	107	76-120	2	20	
1,3-Dichlorobenzene	25.00	23.71	95	75-120	2	20	
1,4-Dichlorobenzene	25.00	22.99	92	77-120	2	23	
n-Butylbenzene	25.00	39.91 b	160 *	76-120	2	21	M1 V3
1,2-Dichlorobenzene	25.00	24.32	97	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	24.71	99	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	27.58	110	73-121	5	20	
Hexachlorobutadiene	25.00	24.04	96	73-123	2	25	
Naphthalene	25.00	31.45	126 *	62-121	5	32	M1
1,2,3-Trichlorobenzene	25.00	29.24	117	66-123	4	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	116	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214922 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214922 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839386393006 File : kip06 Time : 25-SEP-2009 09:38

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	16216	15.87	
75	30% - 60% of mass 95	48227	47.21	
95		102152	100.00	
96	5% - 9% of mass 95	7663	7.50	
173	< 2% of mass 174	316	0.42	
174	> 50% and < 100% of mass 95	75722	74.13	
175	5% - 9% of mass 174	5360	7.08	
176	> 95% and < 101% of mass 174	73865	97.55	
177	5% - 9% of mass 176	4860	6.58	

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS BFB TUNE FOR 214922 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839387930014 File : kiq14 Time : 26-SEP-2009 15:07

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	31211	16.41	
75	30% - 60% of mass 95	87657	46.10	
95		190142	100.00	
96	5% - 9% of mass 95	13825	7.27	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	137986	72.57	
175	5% - 9% of mass 174	10039	7.28	
176	> 95% and < 101% of mass 174	134626	97.56	
177	5% - 9% of mass 176	9031	6.71	

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/28/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214922 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513643 IDF : 1.0
Seqnum : 839386393008.3 File : kip08 Time : 25-SEP-2009 10:31
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.7023	25.00	32.79	ug/L	**31**	20	0.0500	c+ u ***
Chloromethane	0.5160	0.5820	25.00	28.19	ug/L	13	20	0.1000	u
Vinyl Chloride	0.5175	0.6171	25.00	29.81	ug/L	19	20	0.0500	u
Bromomethane	0.2608	0.3405	25.00	32.65	ug/L	**31**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4710	25.00	28.76	ug/L	15	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8096	25.00	27.30	ug/L	9	20	0.0500	u
Iodomethane	0.2599	0.3862	25.00	35.57	ug/L	**42**	20	0.0500	c+ u ***
Acetone	0.1382	0.1496	25.00	27.07	ug/L	8	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4193	25.00	27.97	ug/L	12	20	0.0500	u
Methylene Chloride	0.5280	0.5922	25.00	28.04	ug/L	12	20	0.0500	u
Carbon Disulfide	1.4090	1.5022	25.00	26.65	ug/L	7	20	0.0500	u
MTBE	1.5447	1.6190	25.00	26.20	ug/L	5	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5462	25.00	29.92	ug/L	20	20	0.0500	u
Vinyl Acetate	0.9726	0.9039	25.00	23.23	ug/L	-7	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0455	25.00	27.79	ug/L	11	20	0.1000	u
2-Butanone	0.2331	0.2372	25.00	25.44	ug/L	2	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6218	25.00	28.57	ug/L	14	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7917	25.00	27.74	ug/L	11	20	0.0500	u
Chloroform	0.9238	0.9545	25.00	25.83	ug/L	3	20	0.0500	u
Bromochloromethane	0.2354	0.2663	25.00	28.27	ug/L	13	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7373	25.00	26.21	ug/L	5	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4289	25.00	25.43	ug/L	2	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3288	25.00	23.59	ug/L	-6	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4044	25.00	23.02	ug/L	-8	20	0.0500	u
Benzene	1.3404	1.4552	25.00	27.14	ug/L	9	20	0.0500	u
Trichloroethene	0.3158	0.3385	25.00	26.80	ug/L	7	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3702	25.00	25.75	ug/L	3	20	0.0500	u
Bromodichloromethane	0.3863	0.3954	25.00	25.59	ug/L	2	20	0.0500	u
Dibromomethane	0.1802	0.1825	25.00	25.33	ug/L	1	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2629	25.00	21.59	ug/L	-14	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5727	25.00	27.70	ug/L	11	20	0.0500	u
Toluene	0.9593	0.9748	25.00	25.40	ug/L	2	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5338	25.00	23.29	ug/L	-7	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1795	25.00	25.65	ug/L	3	20	0.0500	u
2-Hexanone	0.2445	0.2126	25.00	21.73	ug/L	-13	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6241	25.00	25.44	ug/L	2	20	0.0500	u
Tetrachloroethene	0.3329	0.3131	25.00	23.52	ug/L	-6	20	0.0500	u
Dibromochloromethane	0.3027	0.2969	25.00	24.52	ug/L	-2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3059	25.00	25.08	ug/L	0	20	0.0500	u
Chlorobenzene	1.0519	1.0573	25.00	25.13	ug/L	1	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3248	25.00	24.18	ug/L	-3	20	0.0500	u
Ethylbenzene	1.8115	1.8631	25.00	25.71	ug/L	3	20	0.0500	u
m,p-Xylenes	0.6304	0.6492	50.00	51.49	ug/L	3	20	0.0500	u
o-Xylene	0.6283	0.6247	25.00	24.86	ug/L	-1	20	0.0500	u
Styrene	1.0367	1.0737	25.00	25.89	ug/L	4	20	0.0500	u
Bromoform	0.1849	0.1942	25.00	22.75	ug/L	-9	20	0.1000	u
Isopropylbenzene	3.8595	3.7225	25.00	24.11	ug/L	-4	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9682	25.00	25.25	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1592	25.00	28.32	ug/L	13	20	0.0500	u
Propylbenzene	3.9448	4.0402	25.00	25.60	ug/L	2	20	0.0500	u
Bromobenzene	1.0220	1.0904	25.00	26.67	ug/L	7	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.0924	25.00	28.19	ug/L	13	20	0.0500	u
2-Chlorotoluene	3.1099	3.4796	25.00	27.97	ug/L	12	20	0.0500	u
4-Chlorotoluene	2.6572	2.8402	25.00	26.72	ug/L	7	20	0.0500	u
tert-Butylbenzene	2.1712	1.9832	25.00	22.84	ug/L	-9	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.0381	25.00	28.79	ug/L	15	20	0.0500	u
sec-Butylbenzene	3.1284	2.8363	25.00	22.67	ug/L	-9	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.4523	25.00	24.58	ug/L	-2	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.7399	25.00	25.74	ug/L	3	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6579	25.00	25.06	ug/L	0	20	0.0500	u
n-Butylbenzene	2.4331	2.7417	25.00	35.59	ug/L	**42**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6616	25.00	25.77	ug/L	3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1762	25.00	25.05	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.1308	25.00	25.99	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3796	25.00	21.70	ug/L	-13	20	0.0500	u
Naphthalene	2.7279	3.1829	25.00	29.17	ug/L	17	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	1.0957	25.00	27.18	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.4472	0.4644	50.00	51.92	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3362	50.00	44.98	ug/L	-10	20	0.0500	u
Toluene-d8	1.4811	1.5250	50.00	51.48	ug/L	3	20	0.0500	u
Bromofluorobenzene	1.2424	1.3301	50.00	53.53	ug/L	7	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2278668	51.38	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	4073965	66.49	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3650497	70.89	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1325276	34.76	17.10	17.10	0.00

BO 09/25/09 : STD ID fixed in LIMS [general version]

BO 09/25/09 : Changed type in LIMS [general version]

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/29/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : 15PPB IDF : 1.0
Seqnum : 839387930015.1 File : kiq15 Time : 26-SEP-2009 15:32
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12998 (33330X), S12773 (33330X), S12217 (66670X), S12929 (33330X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5551	15.00	15.55	ug/L	4	20	0.0500	
Chloromethane	0.5160	0.4974	15.00	14.46	ug/L	-4	20	0.1000	
Vinyl Chloride	0.5175	0.5681	15.00	16.47	ug/L	10	20	0.0500	
Bromomethane	0.2608	0.2761	15.00	15.88	ug/L	6	20	0.0500	
Chloroethane	0.4094	0.4163	15.00	15.25	ug/L	2	20	0.0500	
Trichlorofluoromethane	0.7415	0.7880	15.00	15.94	ug/L	6	20	0.0500	
Acetone	0.1382	0.1364	15.00	14.81	ug/L	-1	20	0.0500	
1,1-Dichloroethene	0.3747	0.3861	15.00	15.45	ug/L	3	20	0.0500	
Iodomethane	0.2599	0.2588	15.00	15.95	ug/L	6	20	0.0500	
Methylene Chloride	0.5280	0.5265	15.00	14.96	ug/L	0	20	0.0500	
Carbon Disulfide	1.4090	1.6312	15.00	17.37	ug/L	16	20	0.0500	
MTBE	1.5447	1.6005	15.00	15.54	ug/L	4	20	0.0500	
trans-1,2-Dichloroethene	0.4564	0.4772	15.00	15.68	ug/L	5	20	0.0500	
Vinyl Acetate	0.9726	0.9427	15.00	14.54	ug/L	-3	20	0.0500	
1,1-Dichloroethane	0.9405	0.9244	15.00	14.74	ug/L	-2	20	0.1000	
2-Butanone	0.2331	0.2206	15.00	14.20	ug/L	-5	20	0.0500	
2,2-Dichloropropane	0.7134	0.7419	15.00	15.60	ug/L	4	20	0.0500	
cis-1,2-Dichloroethene	0.5440	0.5432	15.00	14.98	ug/L	0	20	0.0500	
Chloroform	0.9238	0.8401	15.00	13.64	ug/L	-9	20	0.0500	
Bromochloromethane	0.2354	0.2373	15.00	15.12	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.7032	0.6965	15.00	14.86	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.4217	0.3901	15.00	13.88	ug/L	-7	20	0.0500	
Carbon Tetrachloride	0.3483	0.3076	15.00	13.24	ug/L	-12	20	0.0500	
1,2-Dichloroethane	0.4392	0.3652	15.00	12.47	ug/L	-17	20	0.0500	
Benzene	1.3404	1.2788	15.00	14.31	ug/L	-5	20	0.0500	
Trichloroethene	0.3158	0.3021	15.00	14.35	ug/L	-4	20	0.0500	
1,2-Dichloropropane	0.3595	0.3278	15.00	13.68	ug/L	-9	20	0.0500	
Bromodichloromethane	0.3863	0.3431	15.00	13.32	ug/L	-11	20	0.0500	
Dibromomethane	0.1802	0.1654	15.00	13.77	ug/L	-8	20	0.0500	
4-Methyl-2-Pentanone	0.3044	0.2627	15.00	12.95	ug/L	-14	20	0.0500	
cis-1,3-Dichloropropene	0.5168	0.4859	15.00	14.10	ug/L	-6	20	0.0500	
Toluene	0.9593	0.8873	15.00	13.87	ug/L	-8	20	0.0500	
trans-1,3-Dichloropropene	0.5730	0.4965	15.00	13.00	ug/L	-13	20	0.0500	
1,1,2-Trichloroethane	0.1749	0.1585	15.00	13.59	ug/L	-9	20	0.0500	
2-Hexanone	0.2445	0.1924	15.00	11.80	ug/L	**-21**	20	0.0500	c- ***
1,3-Dichloropropane	0.6133	0.5488	15.00	13.42	ug/L	-11	20	0.0500	
Tetrachloroethene	0.3329	0.2836	15.00	12.78	ug/L	-15	20	0.0500	
Dibromochloromethane	0.3027	0.2547	15.00	12.62	ug/L	-16	20	0.0500	
1,2-Dibromoethane	0.3049	0.2690	15.00	13.24	ug/L	-12	20	0.0500	
Chlorobenzene	1.0519	0.9166	15.00	13.07	ug/L	-13	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3358	0.2814	15.00	12.57	ug/L	-16	20	0.0500	
Ethylbenzene	1.8115	1.6001	15.00	13.25	ug/L	-12	20	0.0500	
m,p-Xylenes	0.6304	0.5340	30.00	25.41	ug/L	-15	20	0.0500	
o-Xylene	0.6283	0.5079	15.00	12.13	ug/L	-19	20	0.0500	
Styrene	1.0367	0.8301	15.00	12.01	ug/L	-20	20	0.0500	
Bromoform	0.1849	0.1646	15.00	12.10	ug/L	-19	20	0.1000	
Isopropylbenzene	3.8595	3.7424	15.00	14.54	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9641	15.00	15.08	ug/L	1	20	0.3000	
1,2,3-Trichloropropane	1.0234	1.1144	15.00	16.33	ug/L	9	20	0.0500	
Propylbenzene	3.9448	3.4674	15.00	13.18	ug/L	-12	20	0.0500	
Bromobenzene	1.0220	1.0205	15.00	14.98	ug/L	0	20	0.0500	
1,3,5-Trimethylbenzene	2.7424	2.9967	15.00	16.39	ug/L	9	20	0.0500	
2-Chlorotoluene	3.1099	3.1135	15.00	15.02	ug/L	0	20	0.0500	
4-Chlorotoluene	2.6572	2.4660	15.00	13.92	ug/L	-7	20	0.0500	
tert-Butylbenzene	2.1712	1.6975	15.00	11.73	ug/L	**-22**	20	0.0500	c- ***
1,2,4-Trimethylbenzene	2.6384	3.0081	15.00	17.10	ug/L	14	20	0.0500	
sec-Butylbenzene	3.1284	2.6304	15.00	12.61	ug/L	-16	20	0.0500	
para-Isopropyl Toluene	2.4941	2.5514	15.00	15.34	ug/L	2	20	0.0500	
1,3-Dichlorobenzene	1.6902	1.5296	15.00	13.58	ug/L	-9	20	0.0500	
1,4-Dichlorobenzene	1.6542	1.4474	15.00	13.12	ug/L	-13	20	0.0500	
n-Butylbenzene	2.4331	2.7776	15.00	18.43	ug/L	**23**	20	0.0500	c+ ***
1,2-Dichlorobenzene	1.6119	1.4935	15.00	13.90	ug/L	-7	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1759	0.1642	15.00	14.00	ug/L	-7	20	0.0500	
1,2,4-Trichlorobenzene	1.0876	1.1732	15.00	16.18	ug/L	8	20	0.0500	
Hexachlorobutadiene	0.4373	0.4035	15.00	13.84	ug/L	-8	20	0.0500	
Naphthalene	2.7279	3.1808	15.00	17.49	ug/L	17	20	0.0500	
1,2,3-Trichlorobenzene	1.0079	1.0971	15.00	16.33	ug/L	9	20	0.0500	
Dibromofluoromethane	0.4472	0.4576	50.00	51.17	ug/L	2	20	0.0500	
1,2-Dichloroethane-d4	0.3737	0.3322	50.00	44.45	ug/L	-11	20	0.0500	
Toluene-d8	1.4811	1.4855	50.00	50.15	ug/L	0	20	0.0500	
Bromofluorobenzene	1.2424	1.4422	50.00	58.04	ug/L	16	20	0.0500	

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2566944	70.53	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	4580495	87.19	11.74	11.74	0.00
Chlorobenzene-d5	2136176	4185745	95.95	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1384562	40.78	17.10	17.10	0.00

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/29/09

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839386393

Date : 09/25/09 Reference : kif12
Sequence : MSVOA11 kip Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
008	CCV/LCS	QC513643	2278668	10.81	4073965	11.74	3650497	14.82	1325276	17.10
010	BLANK	QC513644	2138347	10.81	3937662	11.74	3415858	14.82	958926	17.10
011	SAMPLE	215139-004	2018314	10.81	3749582	11.74	3268096	14.82	1000302	17.10
012	SAMPLE	215157-002	1980455	10.81	3642457	11.74	3162028	14.82	930269	17.10
013	SAMPLE	215157-001	1901721	10.81	3572748	11.74	3128605	14.82	896362	17.10
014	SAMPLE	214922-001	1838597	10.81	3437362	11.74	3020405	14.82	900805	17.10
015	SAMPLE	214925-004	1789307	10.81	3346398	11.74	2956684	14.82	859160	17.10
016	SAMPLE	215157-001	1720358	10.81	3248603	11.74	2884113	14.82	814849	17.10
017	SAMPLE	214925-005	1714097	10.81	3202655	11.74	2833753	14.82	816620	17.10
018	SAMPLE	214925-006	1679206	10.81	3174104	11.74	2808232	14.82	823804	17.10
019	SAMPLE	214925-007	1642883	10.81	3092650	11.74	2728575	14.82	778397	17.10
020	SAMPLE	214925-008	1603067	10.81	3037259	11.74	2690063	14.82	744797	17.10
021	SAMPLE	214925-009	1560251	10.81	2968881	11.74	2647871	14.82	763493	17.10
022	SAMPLE	214925-010	1567569	10.81	2969915	11.74	2665048	14.82	753729	17.10
023	SAMPLE	214925-011	1529818	10.81	2911865	11.74	2589974	14.82	723320	17.10
024	SAMPLE	214925-012	1542860	10.81	2929540	11.74	2627493	14.82	742552	17.10
025	MSS	214922-002	1535968	10.81	2914874	11.74	2592237	14.82	777140	17.10
026	SAMPLE	214922-003	1522637	10.81	2888654	11.74	2556105	14.82	685011	17.10
027	SAMPLE	214922-004	1520466	10.81	2893132	11.74	2599053	14.82	736897	17.10
028	SAMPLE	214922-006	1514038	10.81	2884674	11.74	2587660	14.82	754203	17.10
029	SAMPLE	214923-006	1550460	10.81	2939938	11.74	2614137	14.82	767115	17.10
030	MS	QC513653	1560235	10.81	2931781	11.74	2724706	14.82	1003949	17.10
031	MSD	QC513654	1740157	10.81	3233665	11.74	2994197	14.82	1059377	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839387930

Date : 09/26/09 Reference : kif12
Sequence : MSVOA11 kiq Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
015	CCV	15PPB	2566944	10.81	4580495	11.74	4185745	14.82	1384562	17.10
016	LCS	QC513821	2547431	10.81	4611768	11.74	4237336	14.82	1458511	17.10
018	BLANK	QC513820	2418914	10.81	4437396	11.74	3983696	14.82	1194082	17.10
019	SAMPLE	214924-001	2305976	10.81	4215068	11.74	3796562	14.82	1186307	17.10
020	SAMPLE	214922-003	2250244	10.81	4130606	11.74	3742148	14.82	1121149	17.10
021	SAMPLE	214922-004	2186886	10.81	4013063	11.74	3666289	14.82	1112177	17.10
022	SAMPLE	214922-005	2174196	10.81	4002629	11.74	3641721	14.82	1050900	17.10
023	SAMPLE	214922-007	2184321	10.81	4039751	11.74	3663410	14.82	1131281	17.10
024	SAMPLE	214922-008	2161290	10.81	3985251	11.74	3611224	14.82	1098905	17.10
025	SAMPLE	214922-009	2082585	10.81	3871309	11.74	3528031	14.83	1027428	17.10
026	SAMPLE	214922-010	2038542	10.81	3788334	11.74	3454961	14.82	1057203	17.10
027	SAMPLE	214924-002	1993046	10.81	3712359	11.74	3394033	14.82	1031917	17.10
028	SAMPLE	214924-003	1980537	10.81	3723251	11.74	3385321	14.83	993731	17.10
029	SAMPLE	214924-004	1931640	10.81	3610340	11.74	3309805	14.82	981328	17.10
030	SAMPLE	214924-005	1903792	10.81	3573321	11.74	3292666	14.82	1011522	17.10
031	SAMPLE	214924-006	1879431	10.81	3539471	11.74	3259149	14.82	1016715	17.10
032	SAMPLE	214924-007	1859665	10.81	3507747	11.74	3226916	14.82	971440	17.10
033	MSS	214924-008	1827767	10.81	3455297	11.74	3154138	14.82	945499	17.10
034	SAMPLE	214924-010	1811456	10.81	3428308	11.74	3174677	14.82	1002614	17.09
035	SAMPLE	215054-003	1797791	10.81	3419565	11.74	3186311	14.82	987162	17.10
036	SAMPLE	214923-006	1974126	10.81	3673165	11.74	3441389	14.82	1077600	17.10
037	SAMPLE	214924-009	2065145	10.81	3783103	11.74	3507802	14.82	1067946	17.09
038	MS	QC513822	2043088	10.81	3781965	11.74	3588511	14.82	1278211	17.10
039	MSD	QC513823	2150200	10.81	3926072	11.74	3735956	14.82	1254680	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839386393

Instrument : MSVOA11 Begun : 09/25/09 07:53
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kip01	X	IB			09/25/09 07:53	1.0	1	
002	kip02	X	BFB			09/25/09 08:22	1.0	2	
003	kip03	X	BFB			09/25/09 08:34	1.0	2	
004	kip04	X	BFB			09/25/09 08:48	1.0	2	
005	kip05	X	20PPB			09/25/09 09:05	1.0	3 4 5 6 1	
006	kip06	TUN	BFB			09/25/09 09:38	1.0	2	
007	kip07	X	20PPB			09/25/09 09:52	1.0	3 4 5 6 1	
008	kip08	CCV/LCS	QC513643	Water	155309	09/25/09 10:31	1.0	7 8 9 10 1	
009	kip09	X	IB			09/25/09 10:59	1.0	1	
010	kip10	BLANK	QC513644	Water	155309	09/25/09 11:27	1.0	1	
011	kip11	SAMPLE	215139-004	Water	155309	09/25/09 12:05	1.0	1	
012	kip12	SAMPLE	215157-002	Water	155309	09/25/09 12:33	1.0	1	
013	kip13	SAMPLE	215157-001	Water	155309	09/25/09 13:02	1.0	1	1:MTBE=150
014	kip14	SAMPLE	214922-001	Water	155309	09/25/09 13:30	1.0	1	
015	kip15	SAMPLE	214925-004	Water	155309	09/25/09 13:59	1.0	1	
016	kip16	SAMPLE	215157-001	Water	155309	09/25/09 14:27	5.0	1	
017	kip17	SAMPLE	214925-005	Water	155309	09/25/09 14:55	1.0	1	
018	kip18	SAMPLE	214925-006	Water	155309	09/25/09 15:24	1.0	1	
019	kip19	SAMPLE	214925-007	Water	155309	09/25/09 15:52	1.0	1	
020	kip20	SAMPLE	214925-008	Water	155309	09/25/09 16:20	1.0	1	
021	kip21	SAMPLE	214925-009	Water	155309	09/25/09 16:49	1.0	1	
022	kip22	SAMPLE	214925-010	Water	155309	09/25/09 17:17	1.0	1	
023	kip23	SAMPLE	214925-011	Water	155309	09/25/09 17:45	1.0	1	
024	kip24	SAMPLE	214925-012	Water	155309	09/25/09 18:14	1.0	1	
025	kip25	MSS	214922-002	Water	155309	09/25/09 18:42	1.0	1	
026	kip26	SAMPLE	214922-003	Water	155309	09/25/09 19:10	2.0	1	
027	kip27	SAMPLE	214922-004	Water	155309	09/25/09 19:39	2.0	1	
028	kip28	SAMPLE	214922-006	Water	155309	09/25/09 20:07	4.0	1	
029	kip29	SAMPLE	214923-006	Water	155309	09/25/09 20:35	5.0	1	
030	kip30	MS	QC513653	Water	155309	09/25/09 21:04	1.0	1 7 8 9 10	
031	kip31	MSD	QC513654	Water	155309	09/25/09 21:32	1.0	1 7 8 9 10	
032	kip32	X	IB			09/25/09 22:00	1.0	1	
033	kip33	X	IB			09/25/09 22:29	1.0	1	
034	kip34	X	IB			09/25/09 22:57	1.0	1	
035	kip35	X	IB			09/25/09 23:25	1.0	1	
036	kip36	X	IB			09/25/09 23:53	1.0	1	

BO 09/25/09 : kip04, kip06, adjusted tune

BO 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 36.

BO 09/25/09 : Sequence reviewed up to kip11

LW 09/25/09 : Sequence reviewed through kip11

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/28/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839387930

Instrument : MSVOA11 Begun : 09/26/09 09:30
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kiq01	X	IB			09/26/09 09:30	1.0	1	
002	kiq02	X	BFB			09/26/09 09:54	1.0	2	
003	kiq03	X	35PPB			09/26/09 10:17	1.0	3 4 5 6 1	1:BTBZN=55
004	kiq04	X	QC513821	Water	155349	09/26/09 10:45	1.0	7 8 9 10 1	
005	kiq05	X	IB			09/26/09 11:14	1.0	1	
006	kiq06	X	BFB			09/26/09 12:04	1.0	2	
007	kiq07	X	BFB			09/26/09 12:15	1.0	2	
008	kiq08	X	BFB			09/26/09 12:31	1.0	2	
009	kiq09	X	15PPB			09/26/09 12:53	1.0	3 4 5 6 1	
010	kiq10	X	QC513821	Water	155349	09/26/09 13:21	1.0	7 8 9 10 1	
011	kiq11	X	BFB			09/26/09 13:49	1.0	2	
012	kiq12	X	15PPB			09/26/09 14:11	1.0	3 4 5 6 1	
013	kiq13	X	QC513821	Water	155349	09/26/09 14:39	1.0	3 8 9 11 1	
014	kiq14	TUN	BFB			09/26/09 15:07	1.0	2	
015	kiq15	CCV	15PPB			09/26/09 15:32	1.0	3 4 5 6 1	
016	kiq16	LCS	QC513821	Water	155349	09/26/09 16:08	1.0	7 8 9 10 1	
017	kiq17	X	IB			09/26/09 16:37	1.0	1	
018	kiq18	BLANK	QC513820	Water	155349	09/26/09 17:05	1.0	1	
019	kiq19	SAMPLE	214924-001	Water	155349	09/26/09 17:33	1.0	1	
020	kiq20	SAMPLE	214922-003	Water	155349	09/26/09 18:01	1.0	1	
021	kiq21	SAMPLE	214922-004	Water	155349	09/26/09 18:30	1.0	1	
022	kiq22	SAMPLE	214922-005	Water	155349	09/26/09 18:58	1.0	1	
023	kiq23	SAMPLE	214922-007	Water	155349	09/26/09 19:26	1.0	1	
024	kiq24	SAMPLE	214922-008	Water	155349	09/26/09 19:55	1.0	1	
025	kiq25	SAMPLE	214922-009	Water	155349	09/26/09 20:23	1.0	1	
026	kiq26	SAMPLE	214922-010	Water	155349	09/26/09 20:51	1.0	1	
027	kiq27	SAMPLE	214924-002	Water	155349	09/26/09 21:20	1.0	1	
028	kiq28	SAMPLE	214924-003	Water	155349	09/26/09 21:48	1.0	1	
029	kiq29	SAMPLE	214924-004	Water	155349	09/26/09 22:16	1.0	1	
030	kiq30	SAMPLE	214924-005	Water	155349	09/26/09 22:44	1.0	1	
031	kiq31	SAMPLE	214924-006	Water	155349	09/26/09 23:13	1.0	1	
032	kiq32	SAMPLE	214924-007	Water	155349	09/26/09 23:41	1.0	1	
033	kiq33	MSS	214924-008	Water	155349	09/27/09 00:09	1.0	1	
034	kiq34	SAMPLE	214924-010	Water	155349	09/27/09 00:38	1.0	1	
035	kiq35	SAMPLE	215054-003	Water	155349	09/27/09 01:06	1.0	1	pH > 2
036	kiq36	SAMPLE	214923-006	Water	155349	09/27/09 01:34	2.0	1	
037	kiq37	SAMPLE	214924-009	Water	155349	09/27/09 02:03	2.500	1	
038	kiq38	MS	QC513822	Water	155349	09/27/09 02:31	1.0	7 8 9 10 1	
039	kiq39	MSD	QC513823	Water	155349	09/27/09 02:59	1.0	7 8 9 10 1	
040	kiq40	X	IB			09/27/09 03:27	1.0	1	
041	kiq41	X	IB			09/27/09 03:56	1.0	1	
042	kiq42	X	IB			09/27/09 04:24	1.0	1	

TEW 09/26/09 : Adjusted tune prior to file kiq06.

TEW 09/26/09 : File kiq05 was an IB. I updated the sequence after the ccv & lcs failed but mistakenly overwrote file 05 as the new tune.

TEW 09/26/09 : Adjusted tune prior to file kiq08.

TEW 09/26/09 : Adjusted tune prior to file kiq11.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839387930

Instrument : MSVOA11 Begun : 09/26/09 09:30
Method : EPA 8260B SOP Version : TVH_8260B_rv0

TEW 09/26/09 : Adjusted tune prior to file kiq14.

MJD 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/28/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12925 11=S12924

GC/MS VOLATILE ORGANICS

Batch #: 155309

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214923-6	B				2	11	MM 5x, TCE > UL hold 9/28	
2	215139-4	A	<2 ✓					TB	
3	215157-1	B	<2					1x	
4	-2	A						TB	
5	214925-5	A						1x	
6	-6								
7	-7								
8	-8								
9	-9								
10	-10								
11	-11								
12	-12								
13	214922-1	A						TB	
14	-2	A	✓					1x MS	
15	-2	B&D	<2					1x MS/MSD	
16	-3	A				3		2x	
17	-4					4		2x	
18	-5		2					1x PUT OFF	
19	-6		<2			6		4x	
20	-7	2	2					1x PUT OFF	
21	214925-4	A	<2				11	1x	
22	~~214~~								
23	215157-1	C	<2			4	11	MM 5x, MTBE > UL	
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155349

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214922-3	B	<2				11	RRe 1x OD	TEW 9-26-09
2	↓ -4	↓	↓				↓	↓ 1x ↓	↓
3	214923-6	C	<2	LV		14		↓ 2x ↓	
4	214922-5	A	↓					1x	
5	↓ -7	↓	↓					↓	
6	-8								
7	-9								
8	↓ ~~-10~~							↓	
9	214924-1		↓	LV				1x TB	
10	↓ -2	↓						↓	
11	-3								
12	-4								
13	-5								
14	-6								
15	-7								
16	-8		↓					↓ MSS	
17	-9	↓	<2			15		2.5x	
18	↓ -10	↓	↓					1x	
19	215054-3	C	7				↓	1x	↓
20	~~215113-2~~	—						~~100x~~ FOAM put off	
21	MS/MSD	B,C,D	<2				11		9-28-09 TEW
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Laboratory Job Number 214922

ANALYTICAL REPORT

Semivolatile Organics by GC/MS SIM

Matrix: Water

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	09/15/09
Units:	ug/L	Received:	09/16/09
Batch#:	155107	Prepared:	09/20/09

Field ID:	ASE-23B-9C1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	09/22/09
Lab ID:	214922-003		

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.95	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	112	43-120	
2-Fluorobiphenyl	81	42-120	

Field ID:	PL-201A-9C1	Lab ID:	214922-004
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Analyzed	ADEQ Flags
1,4-Dioxane	600	24	25.00	09/23/09	D2

Surrogate	%REC	Limits	Diln Fac	Analyzed	ADEQ Flags
Nitrobenzene-d5	99	43-120	1.000	09/22/09	
2-Fluorobiphenyl	71	42-120	1.000	09/22/09	

Field ID:	ASE-65A-9C1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	09/22/09
Lab ID:	214922-005		

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	1.1	0.95	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	100	43-120	
2-Fluorobiphenyl	86	42-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	09/15/09
Units:	ug/L	Received:	09/16/09
Batch#:	155107	Prepared:	09/20/09

Field ID:	ASE-22B-9C1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	09/22/09
Lab ID:	214922-006		

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	9.6	0.94	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	96	43-120	
2-Fluorobiphenyl	90	42-120	

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC512834	Analyzed:	09/22/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	1.0	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	103	43-120	
2-Fluorobiphenyl	88	42-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512835	Batch#:	155107
Matrix:	Water	Prepared:	09/20/09
Units:	ug/L	Analyzed:	09/22/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,4-Dioxane	3.000	2.511	84	59-120	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	92	43-120	
2-Fluorobiphenyl	87	42-120	

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	155107
MSS Lab ID:	215005-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Prepared:	09/20/09
Diln Fac:	1.000	Analyzed:	09/22/09

Type: MS Lab ID: QC512836

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,4-Dioxane	<0.1980	2.885	2.423	84	59-120	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	95	43-120	
2-Fluorobiphenyl	75	42-120	

Type: MSD Lab ID: QC512837

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,4-Dioxane	3.000	2.454	82	59-120	3	30	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	93	43-120	
2-Fluorobiphenyl	81	42-120	

RPD= Relative Percent Difference

CURTIS & TOMPKINS DFTPP TUNE FOR 214922 MSSIM Water
EPA 8270C

Inst : MSBNA02 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 519366552001 File : uib01 Time : 11-SEP-2009 13:12

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	51692	42.20	
68	< 2% of mass 69	0	0.00	
69		60389	100.00	
70	< 2% of mass 69	319	0.53	
127	40% - 60% of mass 198	61093	49.87	
197	< 1% of mass 198	0	0.00	
198		122504	100.00	
199	5% - 9% of mass 198	8327	6.80	
275	10% - 30% of mass 198	17782	14.52	
365	> 1% of mass 198	1458	1.19	
441	Present, < mass 443	9353	72.41	
442	> 40% and < 100% of mass 198	65226	53.24	
443	17% - 23% of mass 442	12917	19.80	

Analyst: LLH Date: 09/14/09 Reviewer: LW Date: 09/14/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214922 MSSIM Water
EPA 8270C

Inst : MSBNA02 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 519382416001 File : uim01 Time : 22-SEP-2009 13:36

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	74965	48.90	
68	< 2% of mass 69	0	0.00	
69		82213	100.00	
70	< 2% of mass 69	360	0.44	
127	40% - 60% of mass 198	81183	52.96	
197	< 1% of mass 198	0	0.00	
198		153301	100.00	
199	5% - 9% of mass 198	10360	6.76	
275	10% - 30% of mass 198	22517	14.69	
365	> 1% of mass 198	1958	1.28	
441	Present, < mass 443	14491	75.28	
442	> 40% and < 100% of mass 198	101586	66.27	
443	17% - 23% of mass 442	19250	18.95	

Analyst: TDL Date: 09/22/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214922 MSSIM Water
EPA 8270C

Inst : MSBNA03 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 529284342004 File : vgg04 Time : 16-JUL-2009 13:37

Standards: S12054

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	226964	43.33	
68	< 2% of mass 69	0	0.00	
69		278805	100.00	
70	< 2% of mass 69	1349	0.48	
127	40% - 60% of mass 198	266218	50.82	
197	< 1% of mass 198	0	0.00	
198		523797	100.00	
199	5% - 9% of mass 198	36208	6.91	
275	10% - 30% of mass 198	142746	27.25	
365	> 1% of mass 198	17001	3.25	
441	Present, < mass 443	50189	79.85	
442	> 40% and < 100% of mass 198	330837	63.16	
443	17% - 23% of mass 442	62856	19.00	

Analyst: LLH Date: 07/16/09 Reviewer: LW Date: 07/20/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214922 MSSIM Water
EPA 8270C

Inst : MSBNA03 Run Name : DFTPP/PEM IDF : 1.0
Seqnum : 529383627002 File : vin02 Time : 23-SEP-2009 10:04

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	311331	43.31	
68	< 2% of mass 69	0	0.00	
69		501826	100.00	
70	< 2% of mass 69	790	0.16	
127	40% - 60% of mass 198	427648	59.50	
197	< 1% of mass 198	0	0.00	
198		718762	100.00	
199	5% - 9% of mass 198	49081	6.83	
275	10% - 30% of mass 198	195242	27.16	
365	> 1% of mass 198	22418	3.12	
441	Present, < mass 443	112048	87.91	
442	> 40% and < 100% of mass 198	636138	88.50	
443	17% - 23% of mass 442	127461	20.04	

Analyst: LLH Date: 09/23/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 MSSIM Water: EPA 8270C-SIM

Inst : MSBNA02
Calnum : 519366552001
Units : ug/mL

Name : 2PAHSIM
Date : 11-SEP-2009 13:33
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	uib02	519366552002	PAHDIOX #1	11-SEP-2009 13:33	S12862
L2	uib03	519366552003	PAHDIOX #2	11-SEP-2009 14:06	S12863
L3	uib04	519366552004	PAHDIOX #3	11-SEP-2009 14:40	S12864
L4	uib05	519366552005	PAHDIOX #4	11-SEP-2009 15:14	S12865
L5	uib06	519366552006	PAHDIOX #5	11-SEP-2009 15:49	S12866
L6	uib07	519366552007	PAHDIOX #6	11-SEP-2009 16:22	S12867
L7	uib08	519366552008	PAHDIOX #7	11-SEP-2009 16:56	S12868

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
1,4-Dioxane	0.5297m	0.4962m	0.6004m	0.5565m	0.5588m	0.5143m	0.4897m	AVRG		1.86883		0.5351	7	15	0.05	0.99	
Nitrobenzene-d5	0.2068	0.2325	0.2091	0.2782	0.2725	0.2593	0.2707	AVRG		4.04851		0.2470	12	15	0.05	0.99	
2-Fluorobiphenyl	1.2615	1.1081	1.3409	1.2859	1.2604	1.1196	1.3433	AVRG		0.80278		1.2457	8	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
1,4-Dioxane	0.500	-1	1.000	-7	2.500	12	5.000	4	10.00	4	25.00	-4	50.00	-8
Nitrobenzene-d5	0.100	-16	0.200	-6	0.500	-15	1.000	13	2.000	10	5.000	5	10.00	10
2-Fluorobiphenyl	0.100	1	0.200	-11	0.500	8	1.000	3	2.000	1	5.000	-10	10.00	8

LLH 09/14/09 : All manual integrations were done to correct automatically drawn baseline.

Analyst: LLH Date: 09/14/09 Reviewer: LW Date: 09/14/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA02 Name : 2PAHSIM
Calnum : 519366552001 Cal Date : 11-SEP-2009

ICV 519366552009 (uib09 11-SEP-2009) stds: S12219

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,4-Dioxane	10.00	11.11	ug/mL	11	20	m

m=manual integration

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 MSSIM Water: EPA 8270C-SIM

Inst : MSBNA03
Calnum : 529284342001
Units : ug/mL

Name : 3PAHSIM
Date : 16-JUL-2009 14:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	vgg06	529284342006	#2	16-JUL-2009 14:37	S11713
L2	vgg07	529284342007	#3	16-JUL-2009 15:14	S11714
L3	vgg08	529284342008	#4	16-JUL-2009 15:52	S11715
L4	vgg09	529284342009	#1	16-JUL-2009 16:30	S11712
L5	vgg10	529284342010	#5	16-JUL-2009 17:07	S11716
L6	vgg11	529284342011	#6	16-JUL-2009 17:47	S11717
L7	vgg12	529284342012	#7	16-JUL-2009 18:25	S11718

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
1,4-Dioxane	0.4611m	0.4601m	0.4579m	0.4600m	0.4520m	0.4424	0.4458m	AVRG		2.20174		0.4542	2	15	0.05	0.99	
Nitrobenzene-d5	0.2280m	0.2212m	0.2295	0.2092	0.2528	0.2752	0.3035	AVRG		4.07112		0.2456	14	15	0.05	0.99	
2-Fluorobiphenyl	1.4472	1.4610	1.4619	1.4854	1.4684	1.4091	1.4200m	AVRG		0.68946		1.4504	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
1,4-Dioxane	1.000	2	2.500	1	5.000	1	0.500	1	10.00	0	25.00	-3	50.00	-2
Nitrobenzene-d5	0.200	-7	0.500	-10	1.000	-7	0.100	-15	2.000	3	5.000	12	10.00	24
2-Fluorobiphenyl	0.200	0	0.500	1	1.000	1	0.100	2	2.000	1	5.000	-3	10.00	-2

TDL 07/17/09 : All manual integrations due to tailing.

Analyst: TDL Date: 07/17/09 Reviewer: LW Date: 07/20/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA03 Name : 3PAHSIM
Calnum : 529284342001 Cal Date : 16-JUL-2009

ICV 529284342013 (vgg13 16-JUL-2009) stds: S12219

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,4-Dioxane	10.00	10.45	ug/mL	4	20	m

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA02 Run Name : PAHDIOX IDF : 1.0
Seqnum : 519382416002.3 File : uim02 Time : 22-SEP-2009 13:57
Cal : 519366552001 Caldate : 11-SEP-2009
Standards: S12864

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,4-Dioxane	0.5351	0.5656	2.500	2.642	ug/mL	6	20	0.0500	m
Nitrobenzene-d5	0.2470	0.2749	0.5000	0.5565	ug/mL	11	20	0.0500	
2-Fluorobiphenyl	1.2457	1.3544	0.5000	0.5436	ug/mL	9	20	0.0500	

TDL 09/22/09 : Corrected automatically drawn baseline . [general version]

Analyst: LLH Date: 09/23/09 Reviewer: LW Date: 09/29/09

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA03 Run Name : PAHDIOX IDF : 1.0
Seqnum : 529383627003.1 File : vin03 Time : 23-SEP-2009 10:27
Cal : 529284342001 Caldate : 16-JUL-2009
Standards: S12865

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,4-Dioxane	0.4542	0.4528	5.000	4.985	ug/mL	0	20	0.0500	m
Nitrobenzene-d5	0.2456	0.3502	1.000	1.426	ug/mL	**43**	20	0.0500	c+
2-Fluorobiphenyl	1.4504	1.4514	1.000	1.001	ug/mL	0	20	0.0500	

LLH 09/23/09 : Corrected automatically drawn baseline . [general version]

Analyst: LLH Date: 09/23/09 Reviewer: LW Date: 09/29/09

+=high bias c=CCV m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 519382416

Date : 09/22/09
Sequence : MSBNA02 uim

Reference : uim02
Analyzed : 09/22/09 13:57

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS STD	42760	6.90	151551	8.41	69193	10.63	104178	12.55	79332	15.98	52058	17.83
		LOWER LIMIT	21380	6.40	75776	7.91	34597	10.13	52089	12.05	39666	15.48	26029	17.33
		UPPER LIMIT	85520	7.40	303102	8.91	138386	11.13	208356	13.05	158664	16.48	104116	18.33
002	CCV	PAHDIOX	42760	6.90	151551	8.41	69193	10.63	104178	12.55	79332	15.98	52058	17.83
003	BLANK	QC512834	42365	6.90	143370	8.41	64673	10.63	92973	12.55	76315	15.98	50192	17.83
004	LCS	QC512835	43603	6.90	141731	8.41	65186	10.63	92900	12.55	77137	15.98	53352	17.83
005	MSS	215005-003	43073	6.90	141230	8.41	62472	10.63	94990	12.55	71018	15.98	55741	17.83
006	MS	QC512836	41939	6.90	150949	8.41	70885	10.63	99123	12.55	78745	15.98	72151	17.83
007	MSD	QC512837	40747	6.90	150449	8.41	65188	10.63	91916	12.54	81391	15.98	60783	17.83
008	SAMPLE	215005-001	40137	6.90	156893	8.42	68569	10.63	105604	12.55	84696	15.99	72140	17.83
009	SAMPLE	215005-002	43448	6.90	140569	8.42	70423	10.63	94245	12.55	79422	15.98	71086	17.83
010	SAMPLE	214956-001	40061	6.90	142351	8.41	66747	10.63	94594	12.55	65095	15.98	62192	17.83
011	SAMPLE	214956-002	43886	6.90	143075	8.42	65847	10.63	99200	12.55	78623	15.98	62523	17.83
012	SAMPLE	214956-003	41696	6.90	153236	8.41	55227	10.63	95305	12.55	74531	15.98	55032	17.83
013	SAMPLE	214956-004	40811	6.90	155127	8.41	65148	10.63	86612	12.55	73555	15.98	54379	17.83
014	SAMPLE	214922-003	40968	6.90	139358	8.41	64143	10.63	84767	12.55	74220	15.98	45739	17.83
015	SAMPLE	214922-004	39358	6.90	134415	8.41	59646	10.63	103683	12.55	79668	15.99	62545	17.83
016	SAMPLE	214922-005	40046	6.90	164101	8.41	65316	10.63	100593	12.55	74561	15.98	54589	17.83
017	SAMPLE	214922-006	40449	6.90	159865	8.41	62069	10.63	96236	12.55	76132	15.99	51255	17.83
018	SAMPLE	215004-001	43220	6.90	130982	8.41	66633	10.63	101529	12.55	89965	15.99	77595	17.83

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 529383627

Date : 09/23/09
Sequence : MSBNA03 vin

Reference : vin03
Analyzed : 09/23/09 10:27

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS STD	54547	7.35	191008	8.98	107492	11.29	175790	13.24	179910	16.69	164426	18.41
		LOWER LIMIT	27274	6.85	95504	8.48	53746	10.79	87895	12.74	89955	16.19	82213	17.91
		UPPER LIMIT	109094	7.85	382016	9.48	214984	11.79	351580	13.74	359820	17.19	328852	18.91
003	CCV	PAHDIOX	54547	7.35	191008	8.98	107492	11.29	175790	13.24	179910	16.69	164426	18.41
004	SAMPLE	215102-002	57151	7.36	198922	8.99	114867	11.29	189947	13.24	196710	16.68	178898	18.41
005	SAMPLE	215102-011	54603	7.37	189881	8.99	109676	11.29	178941	13.24	192117	16.69	165887	18.41
006	SAMPLE	215102-012	56846	7.37	198594	8.99	113765	11.29	184523	13.24	177182	16.69	153967	18.42
007	SAMPLE	215102-004	58616	7.36	202660	8.99	110401	11.29	178488	13.24	169212	16.69	147634	18.43
008	SAMPLE	215102-009	62496	7.37	215122	8.99	121636	11.29	200043	13.24	200006	16.69	156650	18.42
009	SAMPLE	215102-007	58932	7.36	208583	8.99	117390	11.29	200796	13.24	187919	16.70	134204	18.43
010	SAMPLE	215102-007	55842	7.35	195835	8.98	115452	11.29	193078	13.24	206162	16.69	165969	18.41
011	SAMPLE	214922-004	54282	7.35	190417	8.99	110032	11.29	180823	13.24	200651	16.69	159813	18.41
012	BLANK	QC513238	57516	7.36	200993	8.98	115062	11.29	193280	13.24	210003	16.69	178327	18.41
013	LCS	QC513239	61539	7.36	213002	8.99	122288	11.29	204030	13.24	230616	16.69	193204	18.41
014	MSS	214791-020	59649	7.37	207430	8.99	120047	11.29	198227	13.24	211809	16.69	181405	18.41
015	MS	QC513240	62366	7.37	215930	8.99	122603	11.29	200157	13.24	220927	16.69	187687	18.41
016	MSD	QC513241	59438	7.36	204334	8.99	117816	11.29	193271	13.24	211803	16.69	175919	18.41
017	SAMPLE	214791-010	61655	7.36	215744	8.99	126674	11.29	209115	13.24	224370	16.69	184158	18.41
018	SAMPLE	214791-011	59840	7.36	209399	8.99	121699	11.29	200368	13.24	216280	16.69	175146	18.41
019	SAMPLE	214791-014	59259	7.36	210081	8.99	119650	11.29	198372	13.23	214820	16.69	174630	18.41
020	SAMPLE	214791-015	58243	7.36	205246	8.99	119138	11.29	196379	13.23	215963	16.68	180282	18.41
021	SAMPLE	214791-016	59711	7.36	204053	8.99	115335	11.29	191165	13.24	187370	16.69	145996	18.41
022	SAMPLE	214791-017	60213	7.35	211615	8.98	122738	11.29	203243	13.24	220619	16.69	180243	18.41
023	SAMPLE	214791-018	60101	7.36	209421	8.99	122601	11.29	199797	13.24	220806	16.69	175651	18.41
024	SAMPLE	214847-007	57816	7.36	202200	8.99	117191	11.29	193007	13.24	209664	16.69	174141	18.41
025	SAMPLE	214847-008	59378	7.36	207124	8.99	119028	11.29	197372	13.24	214709	16.69	174539	18.41
026	SAMPLE	214847-009	57303	7.37	199231	8.99	115829	11.29	190217	13.24	208478	16.69	168489	18.41
027	MSS	214915-002	51927	7.36	178873	8.99	102936	11.29	166546	13.24	167483	16.69	97523	18.42
028	MS	QC513242	53700	7.36	186003	8.99	108146	11.29	176043	13.24	163261	16.69	92252	18.42
029	MSD	QC513243	52313	7.35	184619	8.98	106199	11.29	173368	13.24	161321	16.69	89757	18.42
030	SAMPLE	214791-007	55892	7.36	194426	8.99	114183	11.29	189547	13.23	186984	16.69	101236	18.41
031	SAMPLE	214791-008	50318	7.36	175600	8.98	103021	11.29	171842	13.24	165975	16.69	86454	18.42
032	SAMPLE	214791-009	52309	7.36	184909	8.99	107269	11.29	179192	13.23	173662	16.69	85275	18.42

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 519366552

Instrument : MSBNA02 Begun : 09/11/09 13:12
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	uib01	TUN	DFTPP/PEM 50UG/ML			09/11/09 13:12	1.0	1	
002	uib02	ICAL	PAHDIOX #1			09/11/09 13:33	1.0	2	
003	uib03	ICAL	PAHDIOX #2			09/11/09 14:06	1.0	3	
004	uib04	ICAL	PAHDIOX #3			09/11/09 14:40	1.0	4	
005	uib05	ICAL	PAHDIOX #4			09/11/09 15:14	1.0	5	
006	uib06	ICAL	PAHDIOX #5			09/11/09 15:49	1.0	6	
007	uib07	ICAL	PAHDIOX #6			09/11/09 16:22	1.0	7	
008	uib08	ICAL	PAHDIOX #7			09/11/09 16:56	1.0	8	
009	uib09	ICV	SIMICV			09/11/09 17:32	1.0	9	

LLH 09/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 009.

Analyst: LLH Date: 09/14/09 Reviewer: LW Date: 09/14/09

Standards used: 1=S12602 2=S12862 3=S12863 4=S12864 5=S12865 6=S12866 7=S12867 8=S12868 9=S12219

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 519382416

Instrument : MSBNA02 Begun : 09/22/09 13:36
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	uim01	TUN	DFTPP/PEM 50UG/ML			09/22/09 13:36	1.0	1	
002	uim02	CCV	PAHDIOX			09/22/09 13:57	1.0	2	
003	uim03	BLANK	QC512834	Water	155107	09/22/09 14:31	1.0	3	
004	uim04	LCS	QC512835	Water	155107	09/22/09 15:04	1.0	3	
005	uim05	MSS	215005-003	Water	155107	09/22/09 15:38	1.0	3	
006	uim06	MS	QC512836	Water	155107	09/22/09 16:12	1.0	3	
007	uim07	MSD	QC512837	Water	155107	09/22/09 16:45	1.0	3	
008	uim08	SAMPLE	215005-001	Water	155107	09/22/09 17:18	1.0	3	
009	uim09	SAMPLE	215005-002	Water	155107	09/22/09 17:52	1.0	3	
010	uim10	SAMPLE	214956-001	Water	155107	09/22/09 18:29	1.0	3	
011	uim11	SAMPLE	214956-002	Water	155107	09/22/09 19:04	1.0	3	1:DIOXANE14=360
012	uim12	SAMPLE	214956-003	Water	155107	09/22/09 19:41	1.0	3	
013	uim13	SAMPLE	214956-004	Water	155107	09/22/09 20:19	1.0	3	1:DIOXANE14=70
014	uim14	SAMPLE	214922-003	Water	155107	09/22/09 20:56	1.0	3	
015	uim15	SAMPLE	214922-004	Water	155107	09/22/09 21:32	1.0	3	1:DIOXANE14=420
016	uim16	SAMPLE	214922-005	Water	155107	09/22/09 22:13	1.0	3	
017	uim17	SAMPLE	214922-006	Water	155107	09/22/09 22:50	1.0	3	
018	uim18	SAMPLE	215004-001	Water	155107	09/22/09 23:27	1.0	3	

LLH 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 007.

TDL 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

Standards used: 1=S12602 2=S12864 3=S12761

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 529284342

Instrument : MSBNA03 Begun : 07/16/09 11:02
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	vgg01	TUN	DFTPP/PEM			07/16/09 11:02	1.0	1	
002	vgg02	CCV	PAHDIOX RT CHECK			07/16/09 11:28	1.0	2	
003	vgg03	CCV	PAHDIOX RT CHECK			07/16/09 12:58	1.0	2	
004	vgg04	TUN	DFTPP/PEM			07/16/09 13:37	1.0	1	
005	vgg05	XICAL	#1			07/16/09 13:59	1.0	3	
006	vgg06	ICAL	#2			07/16/09 14:37	1.0	4	
007	vgg07	ICAL	#3			07/16/09 15:14	1.0	5	
008	vgg08	ICAL	#4			07/16/09 15:52	1.0	6	
009	vgg09	ICAL	#1			07/16/09 16:30	1.0	7	
010	vgg10	ICAL	#5			07/16/09 17:07	1.0	8	
011	vgg11	ICAL	#6			07/16/09 17:47	1.0	9	
012	vgg12	ICAL	#7			07/16/09 18:25	1.0	10	
013	vgg13	ICV	SIMICV			07/16/09 19:02	1.0	11	

LLH 07/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 013.

LLH 07/17/09 : file VGG05 injected wrong std

Analyst: LLH Date: 07/17/09 Reviewer: LW Date: 07/20/09

Standards used: 1=S12054 2=S12148 3=S12712 4=S11713 5=S11714 6=S11715 7=S11712 8=S11716 9=S11717 10=S11718 11=S12219

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 529383627

Instrument : MSBNA03 Begun : 09/23/09 09:47
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	vin01	TUN	DFTPP/PEM			09/23/09 09:47	1.0	1	
002	vin02	TUN	DFTPP/PEM			09/23/09 10:04	1.0	1	
003	vin03	CCV	PAHDIOX			09/23/09 10:27	1.0	2	
004	vin04	SAMPLE	215102-002	Soil	155192	09/23/09 11:05	1.0	3	
005	vin05	SAMPLE	215102-011	Soil	155192	09/23/09 11:43	1.0	3	
006	vin06	SAMPLE	215102-012	Soil	155192	09/23/09 12:21	1.0	3	
007	vin07	SAMPLE	215102-004	Soil	155192	09/23/09 13:00	1.0	3	
008	vin08	SAMPLE	215102-009	Soil	155192	09/23/09 13:36	1.0	3	
009	vin09	SAMPLE	215102-007	Soil	155192	09/23/09 14:12	3.0	3	11:PHAN=51
010	vin10	SAMPLE	215102-007	Soil	155192	09/23/09 14:49	50.0	3	
011	vin11	SAMPLE	214922-004	Water	155107	09/23/09 15:26	25.0	3	
012	vin12	BLANK	QC513238	Soil	155205	09/23/09 16:37	1.0	3	
013	vin13	LCS	QC513239	Soil	155205	09/23/09 17:13	1.0	3	
014	vin14	MSS	214791-020	Soil	155205	09/23/09 17:51	1.0	3	
015	vin15	MS	QC513240	Soil	155205	09/23/09 18:29	1.0	3	
016	vin16	MSD	QC513241	Soil	155205	09/23/09 19:06	1.0	3	
017	vin17	SAMPLE	214791-010	Soil	155205	09/23/09 19:43	1.0	3	
018	vin18	SAMPLE	214791-011	Soil	155205	09/23/09 20:22	1.0	3	
019	vin19	SAMPLE	214791-014	Soil	155205	09/23/09 21:00	1.0	3	
020	vin20	SAMPLE	214791-015	Soil	155205	09/23/09 21:38	1.0	3	
021	vin21	SAMPLE	214791-016	Soil	155205	09/23/09 22:17	1.0	3	
022	vin22	SAMPLE	214791-017	Soil	155205	09/23/09 22:56	1.0	3	
023	vin23	SAMPLE	214791-018	Soil	155205	09/23/09 23:39	1.0	3	
024	vin24	SAMPLE	214847-007	Soil	155205	09/24/09 00:18	1.0	3	
025	vin25	SAMPLE	214847-008	Soil	155205	09/24/09 01:02	1.0	3	
026	vin26	SAMPLE	214847-009	Soil	155205	09/24/09 01:42	1.0	3	
027	vin27	MSS	214915-002	Soil	155205	09/24/09 02:26	6.25	3	
028	vin28	MS	QC513242	Soil	155205	09/24/09 03:07	6.25	3	
029	vin29	MSD	QC513243	Soil	155205	09/24/09 03:45	6.25	3	
030	vin30	SAMPLE	214791-007	Soil	155205	09/24/09 04:24	1.0	3	
031	vin31	SAMPLE	214791-008	Soil	155205	09/24/09 05:02	10.0	3	
032	vin32	SAMPLE	214791-009	Soil	155205	09/24/09 05:43	6.25	3	

LLH 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 009.

LLH 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 10.

TDL 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

Standards used: 1=S12602 2=S12865 3=S12761

SAMPLE PREPARATION SUMMARY

Batch # : 155107 Analysis : 14DIOXANE
Started By : DJT Prep Date : 20-SEP-2009 16:50 Finished By : SFL
Method : 3520C Units : mL
Spike #1 ID : S12722 Spike #2 ID : S12970

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214901-008		Water	1040	1	1	0.0009615	7	1				8270-SIM	
214901-009		Water	1050	1	1	0.0009524	5	1				8270-SIM	
214901-010		Water	1040	1	1	0.0009615	7	1				8270-SIM	
214922-003		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
214922-004		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
214922-005		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
214922-006		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214940-002		Water	1060	1	1	0.0009434	7	1				8270-SIM	
214940-003		Water	1050	1	1	0.0009524	5	1				8270-SIM	
214940-004		Water	1060	1	1	0.0009434	7	1				8270-SIM	
214956-001		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214956-002		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214956-003		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214956-004		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214959-007		Water	1060	1	1	0.0009434	7	1				8270-SIM	
214959-011		Water	1040	1	1	0.0009615	7	1				8270-SIM	
215004-001		Water	1020	1	1	0.0009804	7	1				8270-SIM	
215005-001		Water	1000	1	1	0.001	7	1				8270-SIM	
215005-002		Water	1010	1	1	0.0009901	7	1				8270-SIM	
215005-003		Water	1010	1	1	0.0009901	7	1				8270-SIM	mss
QC512834	BLANK	Water	1000	1	1	0.001		2				8270-SIM	poss 2x surr
QC512835	LCS	Water	1000	1	1	0.001		1	1			8270-SIM	
QC512836	MS	Water	1040	1	1	0.0009615	7	1	1			8270-SIM	
QC512837	MSD	Water	1000	1	1	0.001	7	1	1			8270-SIM	

LLH 09/22/09 : MB was double surrogated.

LLH: 09/22/09 TDL: 09/23/09 LW: 09/23/09

BNA (8270 & 625) Water Prep Log **Curtis & Tompkins, Ltd.**

LIMS Analysis: 8270-SIM/14DIOX
LIMS Batch No: 155107
Date Extracted: 9/20/09

Extraction Method:
☒ mod.EPA 3520c cont.L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214901-008	L	1040	7	1.0		
009	J	1050	5			
010	L	1040	7			
214922-003	H	1050				
004						
005						
006		1060				
214940-002	L					
003	J	1050	5			
004	L	1060	7			
214956-001	E					
002						
003						
004						
214959-007	J					
011	B	1040				
215004-001	A	1020				
215005-001		1000				
002		1010				
003						MSS
MB QC 512834	NA	1000	NA			POSS 2X SURR
LCS 5						
MS 6	F	1040	7			
MSD 7	G	1000				

	Lot# / LIMS # / Time	Date/ Initials
1.0 mL of surrogate solution was added to all samples	S12722B	DJS 9/20/09
1.0 mL of matrix spiking solution was added to all spikes	S12970B	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS093334	
Cont. L/L extracted with 450mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1650	
Extraction End Time:	1110	DDC 9/21/09
pH of all samples adjusted to pH ≥ 11 with 10 N NaOH	NA	SFL 9/22/09
Extraction Start Time:		
Extraction End Time:		
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49007904	
Concentrated to final volume at temperature (degrees C)	70°	
Relinquished to BNA department		

9/20/09
Extraction Chemist **Date**

Contined from Page 1
Continued on Page 1

9/22/09
Reviewed by **Date**

Laboratory Job Number 214922

ANALYTICAL REPORT

Metals

Matrix: Water

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214922	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-23B-9C1	Units:	ug/L
Lab ID:	214922-003	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	2,200	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Arsenic	5.3	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Barium	150	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Cadmium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Calcium	80,000	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Chromium	9.4	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Cobalt	2.6	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Copper	14	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Iron	4,200	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Lead	4.0	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Magnesium	27,000	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Manganese	460	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Mercury	0.46	0.20	1.000	155194	09/23/09	09/23/09	METHOD	EPA 7470A	
Molybdenum	9.3	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Nickel	7.6	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Potassium	5,900	50	5.000	155040	09/17/09	09/23/09	EPA 200.8	EPA 6020	
Selenium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Sodium	200,000	500	50.00	155040	09/17/09	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Vanadium	8.9	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Zinc	39	5.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214922	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	PL-201A-9C1	Units:	ug/L
Lab ID:	214922-004	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Arsenic	28	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Barium	270	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Cadmium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Calcium	77,000	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Chromium	1.1	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Cobalt	8.0	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Copper	26	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Iron	190	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Lead	1.5	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Magnesium	32,000	50	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Manganese	3,200	5.0	50.00	155040	09/17/09	09/23/09	EPA 200.8	EPA 6020	D1
Mercury	ND	0.20	1.000	155194	09/23/09	09/23/09	METHOD	EPA 7470A	
Molybdenum	1.2	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Nickel	18	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Potassium	5,700	50	5.000	155040	09/17/09	09/23/09	EPA 200.8	EPA 6020	
Selenium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Sodium	270,000	500	50.00	155040	09/17/09	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Vanadium	1.2	1.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	
Zinc	21	5.0	5.000	155040	09/17/09	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214922	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-65A-9C1	Units:	ug/L
Lab ID:	214922-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Antimony	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Arsenic	7.0	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Barium	67	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Beryllium	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Cadmium	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Calcium	50,000	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	M2
Chromium	2.0	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Cobalt	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Copper	1.1	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Iron	ND	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Lead	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Magnesium	19,000	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Manganese	1.4	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Mercury	ND	0.20	1.000	155194	09/23/09	09/23/09	METHOD	EPA 7470A	
Molybdenum	3.0	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Nickel	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Potassium	5,400	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Selenium	1.2	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Silver	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Sodium	250,000	500	50.00	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	D1 M2 M3
Thallium	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Vanadium	8.2	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Zinc	ND	5.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214922	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-22B-9C1	Units:	ug/L
Lab ID:	214922-006	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Antimony	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Arsenic	5.1	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Barium	120	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Beryllium	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Cadmium	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Calcium	83,000	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Chromium	46	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Cobalt	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Copper	1.5	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Iron	63	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Lead	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Magnesium	30,000	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Manganese	16	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Mercury	ND	0.20	1.000	155194	09/23/09	09/23/09	METHOD	EPA 7470A	
Molybdenum	1.3	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Nickel	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Potassium	6,000	50	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Selenium	2.2	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Silver	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Sodium	230,000	500	50.00	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	D1
Thallium	ND	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Vanadium	6.0	1.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	
Zinc	ND	5.0	5.000	155149	09/21/09	09/22/09	EPA 3010A	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	5.000
Lab ID:	QC512570	Batch#:	155040
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/22/09

Analyte	Result	RL	ADEQ Flags
Aluminum	ND	50	
Antimony	ND	1.0	
Arsenic	ND	1.0	
Barium	ND	1.0	
Beryllium	ND	1.0	
Cadmium	ND	1.0	
Calcium	ND	50	
Chromium	ND	1.0	
Cobalt	ND	1.0	
Copper	ND	1.0	
Iron	ND	50	
Lead	ND	1.0	
Magnesium	ND	50	
Manganese	ND	1.0	
Molybdenum	ND	1.0	
Nickel	ND	1.0	
Potassium	ND	50	
Selenium	ND	1.0	
Silver	ND	1.0	
Sodium	ND	50	
Thallium	ND	1.0	
Vanadium	ND	1.0	
Zinc	ND	5.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Matrix:	Water	Batch#:	155040
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: BS Lab ID: QC512571

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Aluminum	10,000	9,900	99	78-114	
Antimony	100.0	96.50	97	81-108	
Arsenic	100.0	98.40	98	88-120	
Barium	100.0	95.35	95	90-120	
Beryllium	100.0	96.00	96	89-120	
Cadmium	100.0	96.55	97	88-120	
Calcium	10,000	10,320	103	89-112	
Chromium	100.0	102.4	102	90-120	
Cobalt	100.0	102.8	103	88-118	
Copper	100.0	100.4	100	82-114	
Iron	10,000	10,370	104	89-120	
Lead	100.0	104.0	104	89-120	
Magnesium	10,000	9,830	98	77-114	
Manganese	100.0	99.05	99	90-120	
Molybdenum	100.0	95.05	95	84-108	
Nickel	100.0	103.9	104	89-120	
Potassium	10,000	8,975	90	87-110	
Selenium	100.0	104.1	104	90-120	
Silver	100.0	91.65	92	86-120	
Sodium	10,000	9,820	98	85-116	
Thallium	50.00	47.79	96	82-109	
Vanadium	100.0	99.70	100	88-112	
Zinc	100.0	103.0	103	79-110	

Type: BSD Lab ID: QC512572

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Aluminum	10,000	10,540	105	78-114	6	7	
Antimony	100.0	101.2	101	81-108	5	7	
Arsenic	100.0	98.00	98	88-120	0	20	
Barium	100.0	100.4	100	90-120	5	20	
Beryllium	100.0	101.6	102	89-120	6	20	
Cadmium	100.0	100.8	101	88-120	4	20	
Calcium	10,000	10,880	109	89-112	5	7	
Chromium	100.0	102.2	102	90-120	0	20	
Cobalt	100.0	102.6	103	88-118	0	7	
Copper	100.0	102.8	103	82-114	2	9	
Iron	10,000	10,420	104	89-120	1	20	
Lead	100.0	109.9	110	89-120	6	20	
Magnesium	10,000	10,490	105	77-114	6	7	
Manganese	100.0	99.05	99	90-120	0	20	
Molybdenum	100.0	100.9	101	84-108	6	7	
Nickel	100.0	104.8	105	89-120	1	20	
Potassium	10,000	9,395	94	87-110	5	7	
Selenium	100.0	105.9	106	90-120	2	20	
Silver	100.0	96.30	96	86-120	5	20	
Sodium	10,000	9,795	98	85-116	0	8	
Thallium	50.00	50.40	101	82-109	5	7	
Vanadium	100.0	99.85	100	88-112	0	7	
Zinc	100.0	104.2	104	79-110	1	11	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MS Lab ID: QC512573

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Aluminum	13.02	10,000	9,875	99	75-113	
Antimony	0.1575	100.0	97.10	97	76-108	
Arsenic	2.121	100.0	101.8	100	84-124	
Barium	93.15	100.0	188.8	96	85-120	
Beryllium	<0.1188	100.0	97.70	98	79-121	
Cadmium	<0.08328	100.0	96.25	96	82-120	
Calcium	31,840	10,000	43,140	113	69-123	
Chromium	<0.1476	100.0	103.6	104	73-135	
Cobalt	<0.1337	100.0	103.7	104	76-117	
Copper	0.3735	100.0	100.5	100	68-119	
Iron	19.99	10,000	10,530	105	52-155	
Lead	0.2325	100.0	105.4	105	89-121	
Magnesium	5,220	10,000	15,260	100	66-123	
Manganese	1.352	100.0	101.0	100	79-121	
Molybdenum	2.191	100.0	97.35	95	75-109	
Nickel	0.8110	100.0	106.5	106	84-120	
Potassium	2,459	10,000	11,860	94	76-117	
Selenium	<0.1544	100.0	106.1	106	71-140	
Silver	<0.06798	100.0	91.50	92	75-141	
Sodium	12,780	10,000	23,840	111	61-128	
Thallium	0.05750	50.00	48.10	96	70-109	
Vanadium	3.916	100.0	105.2	101	78-115	
Zinc	5.960	100.0	108.1	102	61-124	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MSD Lab ID: QC512574

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Aluminum	10,000	9,635	96	75-113	2	15	
Antimony	100.0	95.25	95	76-108	2	12	
Arsenic	100.0	99.05	97	84-124	3	20	
Barium	100.0	185.8	93	85-120	2	20	
Beryllium	100.0	95.30	95	79-121	2	20	
Cadmium	100.0	93.50	94	82-120	3	20	
Calcium	10,000	42,520	107	69-123	1	24	
Chromium	100.0	100.1	100	73-135	3	20	
Cobalt	100.0	100.1	100	76-117	3	14	
Copper	100.0	96.65	96	68-119	4	23	
Iron	10,000	9,925	99	52-155	6	20	
Lead	100.0	103.0	103	89-121	2	20	
Magnesium	10,000	14,900	97	66-123	2	13	
Manganese	100.0	98.90	98	79-121	2	20	
Molybdenum	100.0	95.60	93	75-109	2	15	
Nickel	100.0	102.8	102	84-120	3	20	
Potassium	10,000	11,440	90	76-117	4	19	
Selenium	100.0	103.4	103	71-140	3	20	
Silver	100.0	89.65	90	75-141	2	20	
Sodium	10,000	23,040	103	61-128	3	19	
Thallium	50.00	46.44	93	70-109	4	13	
Vanadium	100.0	101.1	97	78-115	4	19	
Zinc	100.0	102.6	97	61-124	5	30	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Lab ID:	QC512575	Received:	09/11/09
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
Aluminum	13.02	50.00	ND	250.0	NC	10	
Antimony	0.1575	1.000	ND	2.500	NC	10	
Arsenic	2.121	1.000	2.088 J	2.500	NC	10	E4
Barium	93.15	1.000	91.33	2.500	2	10	
Beryllium	ND	1.000	ND	2.500	NC	10	
Cadmium	ND	1.000	ND	2.500	NC	10	
Calcium	31,840	50.00	32,880	250.0	3	10	
Chromium	ND	1.000	ND	2.500	NC	10	
Cobalt	ND	1.000	ND	2.500	NC	10	
Copper	0.3735	1.000	ND	2.500	NC	10	
Iron	19.99	50.00	39.40 J	250.0	NC	10	E4
Lead	0.2325	1.000	0.8725 J	2.500	NC	10	E4
Magnesium	5,220	50.00	5,320	250.0	2	10	
Manganese	1.352	1.000	1.375 J	2.500	NC	10	E4
Molybdenum	2.191	1.000	2.703	2.500	23 *	10	
Nickel	0.8110	1.000	0.5900 J	2.500	NC	10	E4
Potassium	2,459	50.00	2,598	250.0	6	10	
Selenium	ND	1.000	ND	2.500	NC	10	
Silver	ND	1.000	ND	2.500	NC	10	
Sodium	12,780	50.00	13,110	250.0	3	10	
Thallium	0.05750	1.000	ND	1.250	NC	10	
Vanadium	3.916	1.000	3.800	2.500	NC	10	
Zinc	5.960	5.000	15.67 J	16.27	NC	10	E4

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Post Digest Spike	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Lab ID:	QC512576	Received:	09/11/09
Matrix:	Water	Analyzed:	09/22/09
Units:	ug/L		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Aluminum	13.02	50,000	43,730	87	75-125	
Antimony	0.1575	500.0	480.2	96	75-125	
Arsenic	2.121	500.0	450.3	90	75-125	
Barium	93.15	500.0	496.6	81	75-125	
Beryllium	<0.1188	500.0	415.7	83	75-125	
Cadmium	<0.08328	500.0	423.1	85	75-125	
Calcium	31,840	50,000	75,000	86	75-125	
Chromium	<0.1476	500.0	449.3	90	75-125	
Cobalt	<0.1337	500.0	449.1	90	75-125	
Copper	0.3735	500.0	439.6	88	75-125	
Iron	19.99	50,000	43,150	86	75-125	
Lead	0.2325	500.0	468.3	94	75-125	
Magnesium	5,220	50,000	47,820	85	75-125	
Manganese	1.352	500.0	434.7	87	75-125	
Molybdenum	2.191	500.0	477.0	95	75-125	
Nickel	0.8110	500.0	460.2	92	75-125	
Potassium	2,459	50,000	43,630	82	75-125	
Selenium	<0.1544	500.0	440.6	88	75-125	
Silver	<0.06798	500.0	467.5	93	75-125	
Sodium	12,780	50,000	56,150	87	75-125	
Thallium	0.05750	250.0	229.2	92	75-125	
Vanadium	3.916	500.0	450.5	89	75-125	
Zinc	5.960	500.0	443.4	87	75-125	

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	155040
MSS Lab ID:	214809-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MS Lab ID: QC512577

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Aluminum	<10.95	10,000	9,760	98	75-113	
Antimony	0.1120	100.0	95.75	96	76-108	
Arsenic	4.982	100.0	103.2	98	84-124	
Barium	108.8	100.0	195.8	87	85-120	
Beryllium	<0.1188	100.0	97.20	97	79-121	
Cadmium	<0.08328	100.0	94.85	95	82-120	
Calcium	32,730	10,000	42,260	95	69-123	
Chromium	<0.1476	100.0	102.9	103	73-135	
Cobalt	0.6970	100.0	104.1	103	76-117	
Copper	<0.1276	100.0	100.0	100	68-119	
Iron	1,592	10,000	11,870	103	52-155	
Lead	0.2885	100.0	104.8	105	89-121	
Magnesium	5,210	10,000	14,770	96	66-123	
Manganese	699.5	100.0	800.5	101	NM 79-121	M3
Molybdenum	1.562	100.0	95.95	94	75-109	
Nickel	0.6705	100.0	105.6	105	84-120	
Potassium	2,481	10,000	11,690	92	76-117	
Selenium	<0.1544	100.0	104.3	104	71-140	
Silver	<0.06798	100.0	90.45	90	75-141	
Sodium	12,520	10,000	22,610	101	61-128	
Thallium	<0.02757	50.00	47.43	95	70-109	
Vanadium	2.789	100.0	103.1	100	78-115	
Zinc	11.53	100.0	104.2	93	61-124	

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	155040
MSS Lab ID:	214809-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MSD Lab ID: QC512578

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Aluminum	10,000	9,500	95	75-113	3	15	
Antimony	100.0	95.00	95	76-108	1	12	
Arsenic	100.0	100.1	95	84-124	3	20	
Barium	100.0	194.3	86	85-120	1	20	
Beryllium	100.0	96.35	96	79-121	1	20	
Cadmium	100.0	92.55	93	82-120	2	20	
Calcium	10,000	42,260	95	69-123	0	24	
Chromium	100.0	101.2	101	73-135	2	20	
Cobalt	100.0	101.3	101	76-117	3	14	
Copper	100.0	97.65	98	68-119	2	23	
Iron	10,000	11,760	102	52-155	1	20	
Lead	100.0	101.9	102	89-121	3	20	
Magnesium	10,000	14,520	93	66-123	2	13	
Manganese	100.0	796.0	97 NM	79-121	1	20	M3
Molybdenum	100.0	95.10	94	75-109	1	15	
Nickel	100.0	104.0	103	84-120	2	20	
Potassium	10,000	11,380	89	76-117	3	19	
Selenium	100.0	101.9	102	71-140	2	20	
Silver	100.0	88.60	89	75-141	2	20	
Sodium	10,000	22,430	99	61-128	1	19	
Thallium	50.00	46.77	94	70-109	1	13	
Vanadium	100.0	100.6	98	78-115	2	19	
Zinc	100.0	101.8	90	61-124	2	30	

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	5.000
Lab ID:	QC513001	Batch#:	155149
Matrix:	Water	Prepared:	09/21/09
Units:	ug/L		

Analyte	Result	RL	Analyzed	ADEQ Flags
Aluminum	ND	50	09/22/09	
Antimony	ND	1.0	09/22/09	
Arsenic	ND	1.0	09/22/09	
Barium	ND	1.0	09/22/09	
Beryllium	ND	1.0	09/22/09	
Cadmium	ND	1.0	09/22/09	
Calcium	ND	50	09/22/09	
Chromium	ND	1.0	09/22/09	
Cobalt	ND	1.0	09/22/09	
Copper	ND	1.0	09/23/09	
Iron	ND	50	09/22/09	
Lead	ND	1.0	09/22/09	
Magnesium	ND	50	09/22/09	
Manganese	ND	1.0	09/22/09	
Molybdenum	ND	1.0	09/22/09	
Nickel	ND	1.0	09/22/09	
Potassium	ND	50	09/22/09	
Selenium	ND	1.0	09/22/09	
Silver	ND	1.0	09/22/09	
Sodium	ND	50	09/22/09	
Thallium	ND	1.0	09/22/09	
Vanadium	ND	1.0	09/22/09	
Zinc	ND	5.0	09/22/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Matrix:	Water	Batch#:	155149
Units:	ug/L	Prepared:	09/21/09
Diln Fac:	5.000		

Type: BS Lab ID: QC513002

Analyte	Spiked	Result	%REC	Limits	Analyzed	ADEQ Flags
Aluminum	20,000	19,270	96	78-114	09/22/09	
Antimony	200.0	179.6	90	81-108	09/22/09	
Arsenic	200.0	184.9	92	88-120	09/22/09	
Barium	200.0	184.0	92	90-120	09/22/09	
Beryllium	200.0	186.5	93	89-120	09/22/09	
Cadmium	200.0	187.1	94	88-120	09/22/09	
Calcium	20,000	19,670	98	89-112	09/22/09	
Chromium	200.0	198.1	99	90-120	09/22/09	
Cobalt	200.0	198.7	99	88-118	09/22/09	
Copper	200.0	188.0	94	82-114	09/22/09	
Iron	20,000	19,190	96	89-120	09/23/09	
Lead	200.0	203.6	102	89-120	09/22/09	
Magnesium	20,000	19,050	95	77-114	09/22/09	
Manganese	200.0	197.2	99	90-120	09/22/09	
Molybdenum	200.0	180.8	90	84-108	09/22/09	
Nickel	200.0	198.9	99	89-120	09/22/09	
Potassium	20,000	19,830	99	87-110	09/22/09	
Selenium	200.0	199.7	100	90-120	09/22/09	
Silver	200.0	172.3	86	86-120	09/22/09	
Sodium	20,000	19,560	98	85-116	09/22/09	
Thallium	100.0	89.45	89	82-109	09/22/09	
Vanadium	200.0	192.8	96	88-112	09/22/09	
Zinc	200.0	183.6	92	79-110	09/22/09	

Type: BSD Lab ID: QC513003

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed	ADEQ Flags
Aluminum	20,000	19,140	96	78-114	1	7	09/22/09	
Antimony	200.0	181.4	91	81-108	1	7	09/22/09	
Arsenic	200.0	183.9	92	88-120	1	20	09/22/09	
Barium	200.0	186.0	93	90-120	1	20	09/22/09	
Beryllium	200.0	190.1	95	89-120	2	20	09/22/09	
Cadmium	200.0	189.9	95	88-120	2	20	09/22/09	
Calcium	20,000	19,730	99	89-112	0	7	09/22/09	
Chromium	200.0	197.1	99	90-120	0	20	09/22/09	
Cobalt	200.0	197.8	99	88-118	0	7	09/22/09	
Copper	200.0	189.2	95	82-114	1	9	09/22/09	
Iron	20,000	19,310	97	89-120	1	20	09/23/09	
Lead	200.0	205.6	103	89-120	1	20	09/22/09	
Magnesium	20,000	18,880	94	77-114	1	7	09/22/09	
Manganese	200.0	196.3	98	90-120	0	20	09/22/09	
Molybdenum	200.0	182.3	91	84-108	1	7	09/22/09	
Nickel	200.0	197.5	99	89-120	1	20	09/22/09	
Potassium	20,000	19,690	98	87-110	1	7	09/22/09	
Selenium	200.0	184.3	92	90-120	8	20	09/22/09	
Silver	200.0	174.4	87	86-120	1	20	09/22/09	
Sodium	20,000	19,750	99	85-116	1	8	09/22/09	
Thallium	100.0	91.50	92	82-109	2	7	09/22/09	
Vanadium	200.0	193.3	97	88-112	0	7	09/22/09	
Zinc	200.0	185.0	92	79-110	1	11	09/22/09	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ASE-65A-9C1	Batch#:	155149
MSS Lab ID:	214922-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Prepared:	09/21/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MS Lab ID: QC513004

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Aluminum	14.44	20,000	18,890	94	75-113	
Antimony	0.1945	200.0	184.1	92	76-108	
Arsenic	6.970	200.0	185.2	89	84-124	
Barium	66.90	200.0	237.2	85	85-120	
Beryllium	<0.1188	200.0	184.9	92	79-121	
Cadmium	<0.08328	200.0	184.4	92	82-120	
Calcium	50,250	20,000	60,950	54 *	69-123	M2
Chromium	2.001	200.0	195.5	97	73-135	
Cobalt	0.2150	200.0	194.0	97	76-117	
Copper	1.097	200.0	181.9	90	68-119	
Iron	27.90	20,000	19,380	97	52-155	
Lead	0.1600	200.0	194.3	97	89-121	
Magnesium	18,550	20,000	33,710	76	66-123	
Manganese	1.436	200.0	193.8	96	79-121	
Molybdenum	2.954	200.0	184.3	91	75-109	
Nickel	0.4955	200.0	192.1	96	84-120	
Potassium	5,435	20,000	23,870	92	76-117	
Selenium	1.243	200.0	179.6	89	71-140	
Silver	<0.06798	200.0	169.4	85	75-141	
Sodium	253,900	20,000	248,900 >LR	-25 NM	61-128	M2 M3
Thallium	0.06950	100.0	91.35	91	70-109	
Vanadium	8.225	200.0	197.9	95	78-115	
Zinc	3.314	200.0	177.6	87	61-124	

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ASE-65A-9C1	Batch#:	155149
MSS Lab ID:	214922-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Prepared:	09/21/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MSD Lab ID: QC513005

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Aluminum	20,000	18,820	94	75-113	0	15	
Antimony	200.0	180.7	90	76-108	2	12	
Arsenic	200.0	189.0	91	84-124	2	20	
Barium	200.0	236.8	85	85-120	0	20	
Beryllium	200.0	184.5	92	79-121	0	20	
Cadmium	200.0	183.8	92	82-120	0	20	
Calcium	20,000	60,750	53 *	69-123	0	24	M2
Chromium	200.0	196.2	97	73-135	0	20	
Cobalt	200.0	193.0	96	76-117	1	14	
Copper	200.0	179.3	89	68-119	1	23	
Iron	20,000	19,390	97	52-155	0	20	
Lead	200.0	192.2	96	89-121	1	20	
Magnesium	20,000	33,770	76	66-123	0	13	
Manganese	200.0	194.0	96	79-121	0	20	
Molybdenum	200.0	182.1	90	75-109	1	15	
Nickel	200.0	190.2	95	84-120	1	20	
Potassium	20,000	23,640	91	76-117	1	19	
Selenium	200.0	181.3	90	71-140	1	20	
Silver	200.0	167.1	84	75-141	1	20	
Sodium	20,000	247,300 >LR	-33 NM	61-128	NC	19	M2 M3
Thallium	100.0	90.35	90	70-109	1	13	
Vanadium	200.0	199.1	95	78-115	1	19	
Zinc	200.0	178.8	88	61-124	1	30	

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ASE-65A-9C1	Units:	ug/L
Type:	Serial Dilution	Batch#:	155149
MSS Lab ID:	214922-005	Sampled:	09/15/09
Lab ID:	QC513006	Received:	09/16/09
Matrix:	Water	Analyzed:	09/22/09

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	ADEQ Flags
Aluminum	14.44	50.00	ND	250.0	NC	10	25.00	
Antimony	0.1945	1.000	ND	2.500	NC	10	25.00	
Arsenic	6.970	1.000	7.155	2.500	3	10	25.00	
Barium	66.90	1.000	60.08	2.500	10	10	25.00	
Beryllium	ND	1.000	ND	2.500	NC	10	25.00	
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	
Calcium	50,250	50.00	45,950	250.0	9	10	25.00	
Chromium	2.001	1.000	1.393 J	2.500	NC	10	25.00	E4
Cobalt	0.2150	1.000	3.233	2.500	NC	10	25.00	
Copper	1.097	1.000	3.788	2.500	NC	10	25.00	
Iron	27.90	50.00	30.98 J	250.0	NC	10	25.00	E4
Lead	0.1600	1.000	ND	2.500	NC	10	25.00	
Magnesium	18,550	50.00	16,870	250.0	9	10	25.00	
Manganese	1.436	1.000	1.835 J	2.500	NC	10	25.00	E4
Molybdenum	2.954	1.000	2.705	2.500	8	10	25.00	
Nickel	0.4955	1.000	ND	2.500	NC	10	25.00	
Potassium	5,435	50.00	4,843	250.0	11 *	10	25.00	
Selenium	1.243	1.000	1.033 J	2.500	NC	10	25.00	E4
Silver	ND	1.000	ND	2.500	NC	10	25.00	
Sodium	253,900	500.0	245,900	2,500	3	10	250.0	
Thallium	0.06950	1.000	ND	1.250	NC	10	25.00	
Vanadium	8.225	1.000	9.083	2.500	10	10	25.00	
Zinc	3.314	5.000	13.11 J	16.27	NC	10	25.00	E4

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ASE-65A-9C1	Units:	ug/L
Type:	Post Digest Spike	Batch#:	155149
MSS Lab ID:	214922-005	Sampled:	09/15/09
Lab ID:	QC513007	Received:	09/16/09
Matrix:	Water	Analyzed:	09/22/09

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	ADEQ Flags
Aluminum	14.44	50,000	47,050	94	75-125	5.000	
Antimony	0.1945	500.0	486.5	97	75-125	5.000	
Arsenic	6.970	500.0	463.2	91	75-125	5.000	
Barium	66.90	500.0	506.5	88	75-125	5.000	
Beryllium	<0.1188	500.0	471.0	94	75-125	5.000	
Cadmium	<0.08328	500.0	461.2	92	75-125	5.000	
Calcium	50,250	50,000	92,600	85	75-125	5.000	
Chromium	2.001	500.0	478.3	95	75-125	5.000	
Cobalt	0.2150	500.0	475.5	95	75-125	5.000	
Copper	1.097	500.0	441.8	88	75-125	5.000	
Iron	27.90	50,000	48,270	96	75-125	5.000	
Lead	0.1600	500.0	495.7	99	75-125	5.000	
Magnesium	18,550	50,000	61,600	86	75-125	5.000	
Manganese	1.436	500.0	471.0	94	75-125	5.000	
Molybdenum	2.954	500.0	488.8	97	75-125	5.000	
Nickel	0.4955	500.0	471.0	94	75-125	5.000	
Potassium	5,435	50,000	52,800	95	75-125	5.000	
Selenium	1.243	500.0	442.0	88	75-125	5.000	
Silver	<0.06798	500.0	480.6	96	75-125	5.000	
Sodium	253,900	500,000	718,500	93	75-125	50.00	D2
Thallium	0.06950	250.0	246.3	98	75-125	5.000	
Vanadium	8.225	500.0	481.6	95	75-125	5.000	
Zinc	3.314	500.0	432.3	86	75-125	5.000	

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	155194
Lab ID:	QC513191	Prepared:	09/23/09
Matrix:	Water	Analyzed:	09/23/09
Units:	ug/L		

Result	RL	ADEQ Flags
ND	0.20	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	155194
Matrix:	Water	Prepared:	09/23/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC513192	2.500	2.360	94	80-120			
BSD	QC513193	2.500	2.320	93	80-120	2	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	155194
Field ID:	ZZZZZZZZZZ	Sampled:	09/17/09
MSS Lab ID:	215019-005	Received:	09/18/09
Matrix:	Filtrate	Prepared:	09/23/09
Units:	ug/L	Analyzed:	09/23/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC513194	<0.03757	2.500	2.770	111	80-120			
MSD	QC513195		2.500	2.700	108	80-120	3	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	155194
MSS Lab ID:	215019-005	Sampled:	09/17/09
Lab ID:	QC513196	Received:	09/18/09
Matrix:	Filtrate	Analyzed:	09/23/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
ND	0.2000	ND	1.000	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

REPORTING SUMMARY FOR 214922 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	VN	ZN
214922-003	MET26	09/22/09 06:06	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+		+	+	+
214922-003	MET26	09/23/09 04:23	50.0																					+			
214922-003	MET26	09/23/09 06:45	5.0																		+						
214922-003	MET04	09/23/09 13:09	1.0															+									
214922-004	MET26	09/22/09 06:16	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+		+	+	+
214922-004	MET26	09/23/09 04:34	50.0														+							+			
214922-004	MET26	09/23/09 06:55	5.0																		+						
214922-004	MET04	09/23/09 13:11	1.0															+									
214922-005	MET26	09/22/09 17:18	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+
214922-005	MET26	09/22/09 19:19	50.0																					+			
214922-005	MET04	09/23/09 13:13	1.0															+									
214922-006	MET26	09/22/09 18:39	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+
214922-006	MET26	09/22/09 19:50	50.0																					+			
214922-006	MET04	09/23/09 13:21	1.0															+									
QC512570	MET26	09/22/09 02:34	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512570	MET06	09/22/09 18:05	5.0																		+						
QC512571	MET26	09/22/09 02:44	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512571	MET06	09/22/09 18:16	5.0																		+						
QC512572	MET26	09/22/09 02:54	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512572	MET06	09/22/09 18:26	5.0																		+						
QC512573	MET26	09/22/09 03:24	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512573	MET06	09/22/09 18:57	5.0																		+						
QC512574	MET26	09/22/09 03:54	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512574	MET06	09/22/09 19:07	5.0																		+						
QC512575	MET26	09/22/09 03:14	25.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512575	MET06	09/22/09 18:47	25.0																		+						
QC512576	MET26	09/22/09 04:04	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512576	MET06	09/22/09 19:18	5.0																		+						
QC512577	MET26	09/22/09 04:45	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512577	MET06	09/22/09 16:42	5.0																		+						
QC512578	MET26	09/22/09 04:55	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+
QC512578	MET06	09/22/09 16:52	5.0																		+						
QC513001	MET09	09/22/09 13:46	1.0		+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+	+	+	+	+
QC513001	MET26	09/22/09 16:48	5.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+	+
QC513001	MET26	09/23/09 21:17	5.0										+														
QC513002	MET09	09/22/09 14:03	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC513002	MET26	09/22/09 16:58	5.0	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+	+	+	+	+
QC513002	MET26	09/23/09 21:27	5.0											+													

REPORTING SUMMARY FOR 214922 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALK	BSA	BAE	CDA	CRO	CUE	FEB	PGN	MGO	HOI	MEA	NGA	KLE	SGA	ANL	TL	VN	ZN
QC513003	MET09	09/22/09 14:07	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC513003	MET26	09/22/09 17:08	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC513003	MET26	09/23/09 21:37	5.0									+									
QC513004	MET26	09/22/09 17:39	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC513005	MET26	09/22/09 17:49	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC513006	MET26	09/22/09 17:29	25.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC513006	MET26	09/22/09 19:30	250.0															+			
QC513007	MET26	09/22/09 17:59	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC513007	MET26	09/22/09 19:40	50.0															+			
QC513191	MET04	09/23/09 12:21	1.0											+							
QC513192	MET04	09/23/09 12:28	1.0											+							
QC513193	MET04	09/23/09 12:30	1.0											+							
QC513194	MET04	09/23/09 12:39	1.0											+							
QC513195	MET04	09/23/09 12:42	1.0											+							
QC513196	MET04	09/23/09 12:44	5.0											+							
QC513197	MET04	09/23/09 12:23	1.0											+							
QC513198	MET04	09/23/09 12:53	1.0											+							
QC513199	MET04	09/23/09 12:55	1.0											+							
QC513200	MET04	09/23/09 12:25	1.0											+							
QC513201	MET04	09/23/09 13:04	1.0											+							
QC513202	MET04	09/23/09 13:07	1.0											+							

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019380797

Instrument : MET26 Begun : 09/21/09 10:37
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i21k00001	TUN				09/21/09 10:37	1.0	1	
002	09i21k00002	X	RINSE			09/21/09 10:43	1.0	2	
003	09i21k00003	X	CALBLANK			09/21/09 10:54	1.0	2	
004	09i21k00004	X				09/21/09 11:04	1.0	3 2	
005	09i21k00005	ICALBLK	CALBLANK			09/21/09 11:14	1.0	2	
006	09i21k00006	ICAL				09/21/09 11:25	1.0	3 2	
007	09i21k00007	ICAL				09/21/09 11:36	1.0	4 2	
008	09i21k00008	ICAL				09/21/09 11:46	1.0	5 2	
009	09i21k00009	ICAL				09/21/09 11:56	1.0	6 2	
010	09i21k00010	ICAL				09/21/09 12:06	1.0	7 2	
011	09i21k00011	ICAL				09/21/09 12:16	1.0	8 2	
012	09i21k00012	ICV				09/21/09 12:25	1.0	9 2	
013	09i21k00013	ICB				09/21/09 12:36	1.0	2	
014	09i21k00014	ICSA				09/21/09 12:46	1.0	10 2	6:CA=320000
015	09i21k00015	ICSAB				09/21/09 12:56	1.0	11 2	10:CA=320000
016	09i21k00016	X	RINSE			09/21/09 13:06	1.0	2	
017	09i21k00017	X	RINSE			09/21/09 13:19	1.0	2	
018	09i21k00018	BS	QC512532	Soil	155033	09/21/09 13:29	25.0	2	
019	09i21k00019	BSD	QC512533	Soil	155033	09/21/09 13:36	25.0	2	
020	09i21k00020	SAMPLE	214812-008	Soil	154881	09/21/09 13:46	50.0	2	1:MN=340
021	09i21k00021	SAMPLE	214812-009	Soil	154881	09/21/09 13:54	50.0	2	1:MN=320
022	09i21k00022	MSS	214895-001	WET Leachate	155049	09/21/09 14:04	500.0	2	
023	09i21k00023	BLANK	QC512602	TCLP Leachate	155047	09/21/09 14:14	50.0	2	1:NA=29000
024	09i21k00024	MSS	214842-001	WET Leachate	155003	09/21/09 14:24	500.0	2	
025	09i21k00025	CCV				09/21/09 14:34	1.0	12 2	
026	09i21k00026	CCB				09/21/09 14:44	1.0	2	
027	09i21k00027	ICSA				09/21/09 14:54	1.0	10 2	6:CA=320000
028	09i21k00028	ICSAB				09/21/09 15:04	1.0	11 2	9:CA=320000
029	09i21k00029	X	RINSE			09/21/09 15:12	1.0	2	
030	09i21k00030	X	RINSE			09/21/09 15:22	1.0	2	
031	09i21k00031	X	RINSE			09/21/09 15:32	1.0	2	
032	09i21k00032	BLANK	QC512401	WET Leachate	155003	09/21/09 15:43	50.0	2	1:NA=31000
033	09i21k00033	SAMPLE	214900-002	Water	154979	09/21/09 15:53	1000	2	
034	09i21k00034	SAMPLE	214901-008	Water	154979	09/21/09 16:03	1000	2	
035	09i21k00035	SAMPLE	214901-009	Water	154979	09/21/09 16:13	50.0	2	
036	09i21k00036	SAMPLE	214901-010	Water	154979	09/21/09 16:23	5.0	2	1:NA=23000
037	09i21k00037	MSS	214847-001	Soil	155033	09/21/09 16:33	50.0	2	
038	09i21k00038	SER	QC512538	Soil	155033	09/21/09 16:50	250.0	2	
039	09i21k00039	PDS	QC512539	Soil	155033	09/21/09 17:00	50.0	13 14 2	
040	09i21k00040	CCV				09/21/09 17:10	1.0	12 2	
041	09i21k00041	CCB				09/21/09 17:19	1.0	2	
042	09i21k00042	SAMPLE	214901-008	Water	154979	09/21/09 17:30	1000	2	
043	09i21k00043	SAMPLE	214901-009	Water	154979	09/21/09 17:40	50.0	2	
044	09i21k00044	SAMPLE	214901-010	Water	154979	09/21/09 17:50	5.0	2	1:NA=24000
045	09i21k00045	CCV				09/21/09 18:00	1.0	12 2	
046	09i21k00046	CCB				09/21/09 18:10	1.0	2	
047	09i21k00047	SAMPLE	214901-008	Water	154979	09/21/09 18:20	100.0	2	
048	09i21k00048	CCV				09/21/09 18:30	1.0	12 2	
049	09i21k00049	CCB				09/21/09 18:40	1.0	2	
050	09i21k00050	BLANK	QC512730	Filtrate	155083	09/21/09 18:51	5.0	2	
051	09i21k00051	BS	QC512731	Filtrate	155083	09/21/09 19:01	5.0	2	
052	09i21k00052	BSD	QC512732	Filtrate	155083	09/21/09 19:11	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019380797

Instrument : MET26 Begun : 09/21/09 10:37
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i21k00053	MSS	214959-001	Filtrate	155083	09/21/09 19:21	5.0	2	
054	09i21k00054	SER	QC512735	Filtrate	155083	09/21/09 19:31	25.0	2	
055	09i21k00055	MS	QC512733	Filtrate	155083	09/21/09 19:41	5.0	2	
056	09i21k00056	MSD	QC512734	Filtrate	155083	09/21/09 19:51	5.0	2	
057	09i21k00057	PDS	QC512736	Filtrate	155083	09/21/09 20:01	5.0	13 14 2	
058	09i21k00058	SAMPLE	214959-005	Filtrate	155083	09/21/09 20:11	5.0	2	
059	09i21k00059	SAMPLE	214959-007	Filtrate	155083	09/21/09 20:21	5.0	2	
060	09i21k00060	CCV				09/21/09 20:31	1.0	12 2	
061	09i21k00061	CCB				09/21/09 20:41	1.0	2	
062	09i21k00062	TUN				09/21/09 20:52	1.0	1	
063	09i21k00063	X	RINSE			09/21/09 20:59	1.0	2	
064	09i21k00064	SAMPLE	214959-008	Filtrate	155083	09/21/09 21:09	5.0	2	
065	09i21k00065	SAMPLE	214959-009	Filtrate	155083	09/21/09 21:19	5.0	2	1:MN=300
066	09i21k00066	SAMPLE	214959-010	Filtrate	155083	09/21/09 21:29	5.0	2	1:MN=680
067	09i21k00067	SAMPLE	214959-011	Filtrate	155083	09/21/09 21:39	5.0	2	
068	09i21k00068	SAMPLE	214959-013	Filtrate	155083	09/21/09 21:50	5.0	2	
069	09i21k00069	CCV				09/21/09 22:00	1.0	12 2	
070	09i21k00070	CCB				09/21/09 22:10	1.0	2	
071	09i21k00071	BLANK	QC512799	Water	155100	09/21/09 22:20	5.0	2	
072	09i21k00072	BS	QC512800	Water	155100	09/21/09 22:30	5.0	2	
073	09i21k00073	BSD	QC512801	Water	155100	09/21/09 22:40	5.0	2	
074	09i21k00074	MSS	214956-001	Water	155100	09/21/09 22:50	5.0	2	2:NA=38000
075	09i21k00075	MS	QC512802	Water	155100	09/21/09 23:00	5.0	2	
076	09i21k00076	MSD	QC512803	Water	155100	09/21/09 23:10	5.0	2	
077	09i21k00077	SAMPLE	214954-001	Water	155100	09/21/09 23:20	5.0	2	
078	09i21k00078	SAMPLE	214954-002	Water	155100	09/21/09 23:30	5.0	2	
079	09i21k00079	SAMPLE	214954-003	Water	155100	09/21/09 23:40	5.0	2	
080	09i21k00080	SAMPLE	214954-004	Water	155100	09/21/09 23:51	5.0	2	1:NA=31000
081	09i21k00081	CCV				09/22/09 00:01	1.0	12 2	
082	09i21k00082	CCB				09/22/09 00:11	1.0	2	
083	09i21k00083	SAMPLE	214956-002	Water	155100	09/22/09 00:21	5.0	2	4:NA=76000
084	09i21k00084	SAMPLE	214956-003	Water	155100	09/22/09 00:31	5.0	2	2:NA=45000
085	09i21k00085	SAMPLE	214956-004	Water	155100	09/22/09 00:41	5.0	2	2:NA=68000
086	09i21k00086	CCV				09/22/09 00:51	1.0	12 2	
087	09i21k00087	CCB				09/22/09 01:01	1.0	2	
088	09i21k00088	X				09/22/09 01:12	1.0	10 2	7:CA=320000
089	09i21k00089	ICSA				09/22/09 01:22	1.0	10 2	6:CA=320000
090	09i21k00090	ICSAB				09/22/09 01:32	1.0	11 2	11:CA=320000
091	09i21k00091	X	RINSE			09/22/09 01:43	1.0	2	
092	09i21k00092	X	RINSE			09/22/09 01:53	1.0	2	
093	09i21k00093	X				09/22/09 02:03	1.0	11 2	11:CA=320000
094	09i21k00094	X	RINSE			09/22/09 02:13	1.0	2	
095	09i21k00095	X	RINSE			09/22/09 02:23	1.0	2	
096	09i21k00096	BLANK	QC512570	Water	155040	09/22/09 02:34	5.0	2	
097	09i21k00097	BS	QC512571	Water	155040	09/22/09 02:44	5.0	2	
098	09i21k00098	BSD	QC512572	Water	155040	09/22/09 02:54	5.0	2	
099	09i21k00099	MSS	214809-001	Water	155040	09/22/09 03:04	5.0	2	
100	09i21k00100	SER	QC512575	Water	155040	09/22/09 03:14	25.0	2	
101	09i21k00101	MS	QC512573	Water	155040	09/22/09 03:24	5.0	2	
102	09i21k00102	CCV				09/22/09 03:34	1.0	12 2	
103	09i21k00103	CCB				09/22/09 03:44	1.0	2	
104	09i21k00104	MSD	QC512574	Water	155040	09/22/09 03:54	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019380797

Instrument : MET26 Begun : 09/21/09 10:37
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09i21k00105	PDS	QC512576	Water	155040	09/22/09 04:04	5.0	13 14 2	
106	09i21k00106	SAMPLE	214947-001	Water	155040	09/22/09 04:14	5.0	2	
107	09i21k00107	SAMPLE	214947-002	Water	155040	09/22/09 04:25	5.0	2	
108	09i21k00108	MSS	214809-002	Water	155040	09/22/09 04:35	5.0	2	
109	09i21k00109	MS	QC512577	Water	155040	09/22/09 04:45	5.0	2	
110	09i21k00110	MSD	QC512578	Water	155040	09/22/09 04:55	5.0	2	
111	09i21k00111	SAMPLE	214809-004	Water	155040	09/22/09 05:05	5.0	2	
112	09i21k00112	SAMPLE	214865-001	Water	155040	09/22/09 05:15	5.0	2	
113	09i21k00113	SAMPLE	214919-001	Water	155040	09/22/09 05:25	5.0	2	3:NA=200000
114	09i21k00114	CCV				09/22/09 05:35	1.0	12 2	
115	09i21k00115	CCB				09/22/09 05:45	1.0	2	
116	09i21k00116	SAMPLE	214919-003	Water	155040	09/22/09 05:56	5.0	2	3:NA=200000
117	09i21k00117	SAMPLE	214922-003	Water	155040	09/22/09 06:06	5.0	2	1:NA=40000
118	09i21k00118	SAMPLE	214922-004	Water	155040	09/22/09 06:16	5.0	2	2:NA=52000
119	09i21k00119	SAMPLE	214924-002	Water	155040	09/22/09 06:26	5.0	2	1:NA=33000
120	09i21k00120	SAMPLE	214924-003	Water	155040	09/22/09 06:36	5.0	2	1:NA=49000
121	09i21k00121	SAMPLE	214924-004	Water	155040	09/22/09 06:47	5.0	2	1:NA=47000
122	09i21k00122	SAMPLE	214924-005	Water	155040	09/22/09 06:57	5.0	2	1:NA=50000
123	09i21k00123	TUN				09/22/09 07:08	1.0	1	
124	09i21k00124	X	RINSE			09/22/09 07:14	1.0	2	
125	09i21k00125	SAMPLE	214924-006	Water	155040	09/22/09 07:25	5.0	2	1:NA=51000
126	09i21k00126	SAMPLE	214924-007	Water	155040	09/22/09 07:35	5.0	2	1:NA=50000
127	09i21k00127	SAMPLE	214924-009	Water	155040	09/22/09 07:45	5.0	2	1:NA=43000
128	09i21k00128	CCV				09/22/09 07:55	1.0	12 2	
129	09i21k00129	CCB				09/22/09 08:05	1.0	2	
130	09i21k00130	SAMPLE	214940-002	Water	155040	09/22/09 08:15	5.0	2	1:NA=23000
131	09i21k00131	SAMPLE	214940-003	Water	155040	09/22/09 08:25	5.0	2	
132	09i21k00132	SAMPLE	214940-004	Water	155040	09/22/09 08:35	5.0	2	
133	09i21k00133	SAMPLE	214901-008	Water	154979	09/22/09 08:49	5.0	2	1:NA=31000
134	09i21k00134	SAMPLE	214901-009	Water	154979	09/22/09 08:59	5.0	2	
135	09i21k00135	SAMPLE	214901-010	Water	154979	09/22/09 09:13	10.0	2	
136	09i21k00136	SAMPLE	214954-001	Water	155100	09/22/09 09:23	5.0	2	
137	09i21k00137	CCV				09/22/09 09:33	1.0	12 2	
138	09i21k00138	CCB				09/22/09 09:43	1.0	2	
139	09i21k00139	ICSA				09/22/09 09:51	1.0	10 2	7:CA=310000
140	09i21k00140	ICSAB				09/22/09 10:02	1.0	11 2	12:CA=320000

JYF 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 140.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019380797

Date : 09/21/09 Reference : 09i21k00005
Sequence : MET26 09i21k00 Analyzed : 09/21/09 11:14

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1494592	4898830	45610	1140935	313689	35119	5839369	3579773	6860220	6802972
		LOWER LIMIT	448378	1469649	13683	342281	94107	10536	1751811	1073932	2058066	2040892
		UPPER LIMIT	1793510	5878596	54732	1369122	376427	42143	7007243	4295728	8232264	8163566
014	ICSA		1296970	4667039	46262	1250542	321984	35659	5146439	3022752	6557161	6389560
015	ICSAB		1340078	4680726	46289	1262872	325822	35757	5144466	2969029	6564741	6383915
018	BS	QC512532	1430134	4687955	44758	1255323	334718	34627	5677258	3734483	6678656	6815781
019	BSD	QC512533	1338295	4672896	43997	1236864	331333	34264	5639441	3743024	6639871	6775317
020	SAMPLE	214812-008	1409836	4851985	45916	1293196	339329	34962	5557539	3674578	6782425	6795311
021	SAMPLE	214812-009	1366697	4549264	45503	1284401	339170	35173	5311869	3481417	6478427	6463079
022	MSS	214895-001	1462313	4655925	44861	1254659	342287	35306	5613704	3721047	6630298	6817712
023	BLANK	QC512602	1419675	4681498	47487	1322519	338123	35026	5663765	3659830	6670973	6819153
024	MSS	214842-001	1445588	4753338	45840	1164192	321331	35507	5798249	3797503	6754277	6917219
025	CCV		1479665	4776908	46316	1280744	341024	35550	5651442	3573597	6742531	6830681
026	CCB		1481881	4779220	44182	1278041	344620	34354	5785428	3688251	6777569	6897472
032	BLANK	QC512401	1452245	4713488	45797	1255808	337949	35486	5635246	3627199	6699311	6730547
033	SAMPLE	214900-002	1427613	4748996	44998	1267231	338154	34890	5741730	3682824	6692083	6759649
034	SAMPLE	214901-008	1305776	4267805	45694	1259606	342049	35747	5280989	3421724	6129734	6268931
035	SAMPLE	214901-009	1360947	4648869	45251	1235289	334593	35153	5670896	3715992	6631448	6821213
036	SAMPLE	214901-010	1120392	4388097	41916	1185405	339725	35319	5430846	3731274	6337665	6648272
037	MSS	214847-001	1249693	4543367	43154	1226197	330958	34025	5481470	3752242	6576115	6790578
038	SER	QC512538	1261216	4494603	42387	1220732	330895	33213	5495325	3736304	6491588	6728016
039	PDS	QC512539	1216512	4560084	43344	1233040	327455	34085	5361334	3572626	6575678	6717797
040	CCV		1351761	4671559	45147	1237743	332783	34679	5520179	3521907	6610233	6742544
041	CCB		1300788	4306092	45358	1243122	335098	35159	5282517	3421120	6166644	6301971
042	SAMPLE	214901-008	1338945	4604388	45062	1244512	338089	35107	5648555	3652060	6593571	6734867
043	SAMPLE	214901-009	1295309	4563426	44504	1230416	332199	34702	5578085	3652548	6507638	6716550
044	SAMPLE	214901-010	1076759	4398638	39524	1175972	338128	33800	5445906	3697165	6334801	6693003
045	CCV		1305192	4646223	44640	1244888	331606	34528	5525192	3494717	6583561	6711038
046	CCB		1281135	4466803	45582	1239573	336054	35319	5480547	3469957	6375281	6479077
047	SAMPLE	214901-008	1270137	4605531	44969	1242654	339005	35294	5669108	3684438	6595795	6779016
048	CCV		1319083	4696584	45302	1261953	335105	35012	5588159	3545993	6666213	6740749
049	CCB		1332398	4651589	44578	1242597	338746	34599	5677464	3642946	6649282	6765812
050	BLANK	QC512730	1324771	4605287	45128	1237436	335614	35044	5643804	3685285	6577644	6715783
051	BS	QC512731	1327094	4641319	44988	1254299	334918	35120	5626992	3661631	6613151	6750386
052	BSD	QC512732	1267182	4385294	45055	1249905	333361	34786	5313883	3519800	6237101	6420751
053	MSS	214959-001	1265057	4563595	43728	1246104	336370	34800	5602660	3699115	6537728	6689423
054	SER	QC512735	1250693	4580559	44232	1229891	336079	34958	5656120	3744827	6592071	6800666
055	MS	QC512733	1253003	4566573	44022	1232657	333217	34909	5595546	3620241	6541401	6784300
056	MSD	QC512734	1244540	4608754	43950	1218412	329550	34605	5623411	3648635	6620633	6840287
057	PDS	QC512736	1275725	4631825	44165	1233264	331186	34612	5549364	3572960	6606918	6848631
058	SAMPLE	214959-005	1334621	5115403	44687	1236922	337179	35626	6267249	4006132	7265689	7544978
059	SAMPLE	214959-007	1301666	4717266	45289	1249055	340009	35924	5734137	3726718	6645996	6836389
060	CCV		1228832	4623429	44657	1261787	335576	35123	5611763	3608927	6636673	6797862
061	CCB		1264017	4665205	45134	1251668	337980	35321	5740470	3687504	6658371	6852328
064	SAMPLE	214959-008	1179381	4388348	44796	1237143	337554	35679	5479040	3584798	6301694	6456700
065	SAMPLE	214959-009	1205718	4606816	44142	1238280	333335	34667	5641705	3598143	6558435	6820876
066	SAMPLE	214959-010	1205095	4600568	43914	1229457	331953	34819	5603947	3590574	6594120	6774695
067	SAMPLE	214959-011	1152873	4579274	42146	1200591	328457	33219	5597157	3619088	6515565	6788509
068	SAMPLE	214959-013	1209766	4562376	43090	1198783	330761	34423	5614986	3689075	6496571	6709788
071	BLANK	QC512799	1133819	4335833	42655	1195565	324352	33957	5440316	3589818	6270337	6512027
072	BS	QC512800	1187327	4492197	43216	1190608	323106	33871	5530047	3634428	6468931	6729575

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019380797

Date : 09/21/09 Reference : 09i21k00005
Sequence : MET26 09i21k00 Analyzed : 09/21/09 11:14

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
073	BSD	QC512801	1169078	4466449	41968	1108919	302338	33476	5537668	3644613	6470336	6705984
075	MS	QC512802	1116062	4446509	41687	1179978	316055	33394	5445284	3476614	6419915	6683075
076	MSD	QC512803	1137703	4500066	41833	1180788	317795	33378	5473429	3503698	6489685	6747376
086	CCV		1173381	4438682	40091	1189267	318022	32168	5456165	3596411	6417696	6795017
087	CCB		1136684	4386394	41733	1178133	319252	33461	5538920	3708324	6415528	6770996
096	BLANK	QC512570	1336970	4467074	40202	1181613	321730	32623	5609921	3777825	6454858	6821558
097	BS	QC512571	1317255	4426750	40959	1165938	315369	33209	5483280	3746700	6374954	6768692
098	BSD	QC512572	1255737	4216184	41210	1163243	315002	32907	5273321	3605605	6070640	6479247
099	MSS	214809-001	1250635	4403574	41129	1251095	337549	33374	5508687	3786101	6347991	6800991
100	SER	QC512575	1248617	4273577	39772	1094316	301851	32528	5456833	3747560	6227330	6706996
101	MS	QC512573	1254545	4248092	38625	1105143	300584	31684	5314998	3739563	6151293	6702059
102	CCV		1250163	4252807	38314	1115748	300777	30826	5211200	3641773	6102004	6599765
103	CCB		1246835	4205431	38877	1117864	302778	31720	5334895	3724199	6116773	6620688
104	MSD	QC512574	1232421	4174728	38472	1119673	303401	31589	5224873	3710148	6037725	6580704
105	PDS	QC512576	1338288	4274196	38834	1179123	315323	31231	5254900	3661002	6161544	6668121
106	SAMPLE	214947-001	1186093	4017382	38649	1111539	301374	31641	5020609	3502845	5794766	6276996
107	SAMPLE	214947-002	1271160	4194439	38152	1101567	301602	31179	5226291	3706476	6003590	6602186
108	MSS	214809-002	1229621	4138134	38079	1102481	299701	31201	5207606	3767877	5996994	6548054
109	MS	QC512577	1213035	4158337	37636	1098766	298286	30938	5266217	3775353	6060260	6718066
110	MSD	QC512578	1206747	4201841	38096	1096066	299322	31146	5324246	3768219	6112108	6777753
111	SAMPLE	214809-004	1222986	4155219	37985	1116703	301162	31149	5303408	3758179	6031363	6631671
112	SAMPLE	214865-001	1226959	4195564	37985	1079958	295170	30987	5335440	3822937	6081406	6694336
113	SAMPLE	214919-001	1323084	4315310	39330	1106078	292217	30618	5055151	3235679	6056303	6361579
114	CCV		1263369	4316134	38523	1143359	306637	30943	5297768	3647734	6210281	6665422
115	CCB		1250314	4307424	39198	1206436	323432	32076	5415642	3747453	6238419	6740928
116	SAMPLE	214919-003	1343933	4338472	40336	1123084	294806	31411	5087017	3165176	6091369	6251350
117	SAMPLE	214922-003	1315109	4307831	40240	1144744	309105	32534	5238386	3563433	6171135	6489437
118	SAMPLE	214922-004	1331067	4276388	39568	1128922	302113	31804	5288977	3562489	6121871	6628241
119	SAMPLE	214924-002	1313996	4256954	39221	1031092	282461	31641	5261694	3634978	6133218	6555013
120	SAMPLE	214924-003	1323134	4249651	37483	1105319	299344	30505	5176979	3619025	6023322	6538422
121	SAMPLE	214924-004	1327112	4222304	38569	1101891	297625	31238	5196489	3628055	6052351	6525385
122	SAMPLE	214924-005	1312760	4222732	38396	1083705	287029	31416	5220014	3628141	6021279	6544046
125	SAMPLE	214924-006	1245342	4053994	37557	1070491	293019	30521	5054459	3557803	5855749	6371427
126	SAMPLE	214924-007	1279232	4148961	37636	1068118	292164	30593	5166327	3584693	5928751	6500163
127	SAMPLE	214924-009	1264096	4152373	37215	1081534	290471	30346	5135813	3546074	5950940	6527893
130	SAMPLE	214940-002	1260840	4172668	38078	1074715	292967	30981	5212294	3673804	5991560	6564648
131	SAMPLE	214940-003	1251289	4142516	35770	1070978	289123	29426	5243994	3797354	6023871	6551988
132	SAMPLE	214940-004	1247990	4127218	36851	956474	262794	30058	5181340	3717415	5951167	6602906
133	SAMPLE	214901-008	985122	3863925	34931	1020207	289883	29969	4998672	3716839	5693950	6508536
134	SAMPLE	214901-009	968751	3868214	34306	1024183	290932	29543	5061918	3786059	5735051	6485264
135	SAMPLE	214901-010	1053653	3985541	34528	1025107	287560	29406	5129920	3740003	5827907	6584059

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019380797

Date : 09/21/09 Reference : 09i21k00005
Sequence : MET26 09i21k00 Analyzed : 09/21/09 11:14

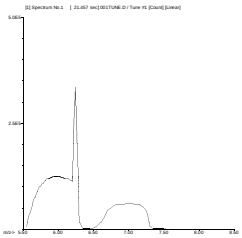
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1494592	4898830	45610	1140935	313689	35119	5839369	3579773	6860220	6802972
		LOWER LIMIT	896755	2939298	27366	684561	188213	21071	3503621	2147864	4116132	4081783
		UPPER LIMIT	1868240	6123538	57013	1426169	392111	43899	7299211	4474716	8575275	8503715
013	ICB		1466481	4468881	46190	1253932	339774	35435	5345762	3362475	6310929	6245256
027	ICSA		1376767	4684291	47105	1256465	327137	36360	5142843	3022093	6567168	6404300
028	ICSAB		1328629	4639855	46617	1254846	326994	35673	5028945	2936535	6510259	6299668
069	CCV		1180103	4528729	42783	1201000	323471	33837	5496418	3564740	6498626	6717760
070	CCB		1190339	4500566	42945	1198521	325233	33875	5642711	3644893	6498913	6751475
074	MSS	214956-001	1144183	4490323	42370	1189110	320815	33229	5470852	3494762	6422000	6641265
077	SAMPLE	214954-001	1149782	4372990	39699	1173048	322929	32736	5567255	3702583	6442586	6705981
078	SAMPLE	214954-002	1145630	4377774	41490	1167600	323772	33936	5540891	3657203	6439440	6703157
079	SAMPLE	214954-003	1159186	4326745	39722	1168150	324090	32682	5512414	3650103	6403581	6757543
080	SAMPLE	214954-004	1170137	4381687	41337	1162686	321281	33695	5500224	3621761	6373777	6733357
081	CCV		1152073	4460202	40984	1198312	317436	32341	5483848	3578325	6397061	6717694
082	CCB		1144755	4438371	42000	1190681	322388	33957	5615724	3692725	6441855	6808364
083	SAMPLE	214956-002	1175405	4508160	42397	1184637	318783	33587	5479288	3477472	6440153	6689104
084	SAMPLE	214956-003	1222569	4435696	41771	1151979	316802	33491	5443284	3478602	6339622	6685418
085	SAMPLE	214956-004	1190621	4437394	42296	1185200	318646	33640	5416146	3474477	6355468	6609093
089	ICSA		1099702	4392536	43032	1181987	306590	34013	4947406	2964750	6265393	6306760
090	ICSAB		1147088	4359663	41204	1173491	305658	32926	4917195	2945951	6236438	6281580
128	CCV		1207603	4181091	37053	1097416	293363	30248	5146606	3638752	6001993	6576386
129	CCB		1212695	4152660	37561	1082374	294035	30547	5231347	3716238	5972446	6561312
136	SAMPLE	214954-001	1188853	4049205	35874	1054953	292339	29874	5150926	3720199	5927181	6614879
137	CCV		1171833	4118006	36733	1074473	288106	29768	5102767	3607479	5913375	6543638
138	CCB		1167989	4110251	36340	1079994	293184	29994	5238064	3715426	5964604	6628495
139	ICSA		1047614	4121953	37594	1076203	276252	30473	4652590	2965040	5883713	6025051
140	ICSAB		1120557	4116974	37883	1082306	280596	30367	4631871	2881698	5855221	6036692

MET26 QC Tune Report

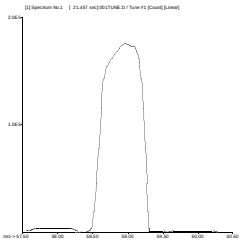
Data File: C:\ICPCHEM\1\DATA\09I21k00.B\001TUNE.D
Date Acquired: Sep 21 2009 10:37 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

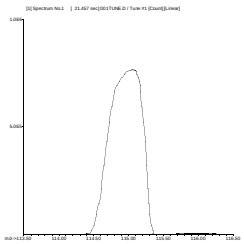
Element	Actual	Required	Flag
7 Li	2.83	5.00	
59 Co	0.86	5.00	
115 In	1.74	5.00	
205 Tl	1.53	5.00	



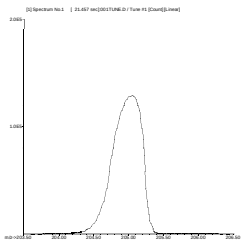
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



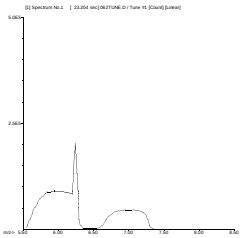
205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET26 QC Tune Report

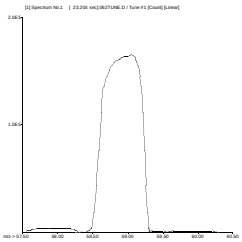
Data File: C:\ICPCHEM\1\DATA\09I21k00.B\062TUNE.D
Date Acquired: Sep 21 2009 08:52 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

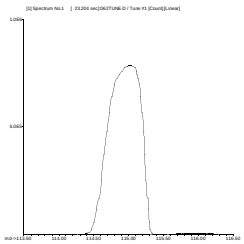
Element	Actual	Required	Flag
7 Li	1.70	5.00	
59 Co	0.97	5.00	
115 In	0.40	5.00	
205 Tl	0.96	5.00	



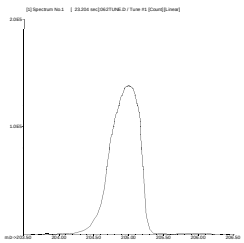
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



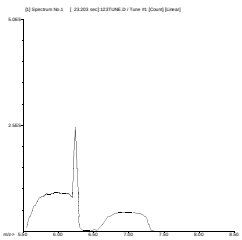
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

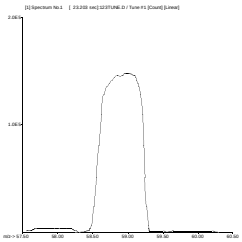
Data File: C:\ICPCHEM\1\DATA\09I21k00.B\123TUNE.D
Date Acquired: Sep 22 2009 07:08 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

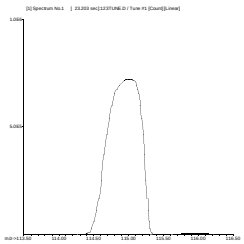
Element	Actual	Required	Flag
7 Li	1.21	5.00	
59 Co	0.79	5.00	
115 In	0.69	5.00	
205 Tl	1.31	5.00	



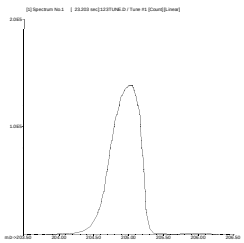
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 METALS Water: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019380797001 Date : 21-SEP-2009 11:14
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i21k00006	1019380797006		21-SEP-2009 11:25	S12854, S12847
L2	09i21k00007	1019380797007		21-SEP-2009 11:36	S12855, S12847
L3	09i21k00008	1019380797008		21-SEP-2009 11:46	S12856, S12847
L4	09i21k00009	1019380797009		21-SEP-2009 11:56	S12857, S12847
L5	09i21k00010	1019380797010		21-SEP-2009 12:06	S12852, S12847
L6	09i21k00011	1019380797011		21-SEP-2009 12:16	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0058	0.0046	0.0044	0.0043	0.0043	0.0042	BLNK	-4.2200	239.072		0.0046	1.000	0.995	
Antimony	A	0.0065	0.0027	0.0026	0.0025	0.0027	0.0026	BLNK	-0.0073	376.687		0.0033	1.000	0.995	
Barium	A	0.0014	8.7E-4	8.3E-4	7.9E-4	7.8E-4	8.2E-4	BLNK	-0.0283	1230.12		9.1E-4	0.999	0.995	
Beryllium	A	0.0033	0.0028	0.0026	0.0026	0.0026	0.0027	BLNK	-0.0166	373.359		0.0028	1.000	0.995	
Cadmium	A	9.1E-4	7.0E-4	6.8E-4	6.7E-4	6.5E-4	6.9E-4	BLNK	-0.0132	1472.63		7.2E-4	0.999	0.995	
Calcium	A	0.0012	3.7E-4	2.6E-4	1.9E-4	1.8E-4	1.7E-4	BLNK	-56.398	5731.51		3.9E-4	1.000	0.995	
Lead	A	0.0163	0.0071	0.0059	0.0048	0.0048	0.0047	BLNK	-0.2309	212.384		0.0073	1.000	0.995	
Magnesium	A	0.0047	0.0036	0.0034	0.0033	0.0033	0.0032	BLNK	-2.4379	313.221		0.0036	1.000	0.995	
Molybdenum	A	0.0023	0.0018	0.0018	0.0017	0.0019	0.0018	BLNK	-0.0191	549.691		0.0019	1.000	0.995	
Potassium	A	0.0874	0.0222	0.0138	0.0065	0.0058	0.0056	BLNK	-143.29	177.471		0.0236	1.000	0.995	
Silver	A	0.0045	0.0034	0.0033	0.0032	0.0033	0.0032	BLNK	-0.0126	310.270		0.0035	1.000	0.995	
Thallium	A	0.0092	0.0065	0.0065	0.0063	0.0070	0.0068	BLNK	-0.0185	145.644		0.0071	1.000	0.995	
Arsenic	E	0.0086	0.0064	0.0059	0.0059	0.0057	0.0058	BLNK	-0.0363	173.744		0.0064	1.000	0.995	
Chromium	E	0.1905	0.0704	0.0590	0.0458	0.0432	0.0444	BLNK	-0.2576	22.6968		0.0755	1.000	0.995	
Cobalt	E	0.0999	0.0862	0.0852	0.0854	0.0811	0.0849	BLNK	-0.0115	11.8840		0.0871	1.000	0.995	
Copper	E	0.3359	0.1390	0.1165	0.0958	0.0890	0.0886	BLNK	-0.2680	11.2974		0.1441	1.000	0.995	
Manganese	E	0.0289	0.0164	0.0156	0.0153	0.0146	0.0150	BLNK	-0.0257	67.1045		0.0176	1.000	0.995	
Nickel	E	0.0468	0.0288	0.0269	0.0253	0.0237	0.0241	BLNK	-0.0470	41.6305		0.0293	1.000	0.995	
Sodium	E	0.0299	0.0091	0.0066	0.0044	0.0040	0.0041	BLNK	-64.084	246.704		0.0097	1.000	0.995	
Vanadium	E	0.0576	0.0376	0.0353	0.0334	0.0323	0.0333	BLNK	-0.0720	30.2516		0.0383	1.000	0.995	
Zinc	E	0.1161	0.0334	0.0208	0.0103	0.0091	0.0090	BLNK	-0.2933	110.801		0.0331	1.000	0.995	
Iron	H	0.0116	0.0081	0.0081	0.0076	0.0075	0.0075	BLNK	-3.8205	133.845		0.0084	1.000	0.995	
Selenium	H	0.0012	0.0010	0.0011	0.0010	10.0E-4	9.8E-4	BLNK	-0.0231	1016.33		0.0010	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	-4	50.00	1	100.0	0	1000	1	10000	2	20000	0
Antimony	A	0.100	137	0.500	0	1.000	-2	10.00	-5	100.0	2	200.0	0
Barium	A	0.100	41	0.500	2	1.000	0	10.00	-3	100.0	-4	200.0	1
Beryllium	A	0.100	6	0.500	0	1.000	-4	10.00	-2	100.0	-2	200.0	1
Cadmium	A	0.100	20	0.500	1	1.000	-1	10.00	-2	100.0	-4	200.0	1
Calcium	A	10.00	13	50.00	-1	100.0	-5	1000	5	10000	2	20000	-1
Lead	A	0.100	15	0.500	5	1.000	2	10.00	0	100.0	3	200.0	-1
Magnesium	A	10.00	23	50.00	8	100.0	5	1000	3	10000	2	20000	-1
Molybdenum	A	0.100	9	0.500	-3	1.000	-5	10.00	-4	100.0	2	200.0	0
Potassium	A	10.00	19	50.00	7	100.0	1	1000	2	10000	2	20000	-1
Silver	A	0.100	26	0.500	4	1.000	0	10.00	-2	100.0	2	200.0	-1
Thallium	A	0.050	-3	0.250	-13	0.500	-10	5.000	-8	50.00	2	100.0	0
Arsenic	E	0.100	13	0.500	3	1.000	-1	10.00	1	100.0	-2	200.0	0
Chromium	E	0.100	75	0.500	8	1.000	8	10.00	1	100.0	-2	200.0	1
Cobalt	E	0.100	7	0.500	0	1.000	0	10.00	1	100.0	-4	200.0	1
Copper	E	0.100	12	0.500	3	1.000	5	10.00	6	100.0	0	200.0	0
Manganese	E	0.100	68	0.500	5	1.000	2	10.00	3	100.0	-2	200.0	0
Nickel	E	0.100	48	0.500	10	1.000	7	10.00	5	100.0	-1	200.0	0
Sodium	E	10.00	-3	50.00	-5	100.0	-2	1000	2	10000	-1	20000	0
Vanadium	E	0.100	2	0.500	-1	1.000	0	10.00	0	100.0	-2	200.0	1
Zinc	E	0.100	893	0.500	211	1.000	101	10.00	12	100.0	0	200.0	0
Iron	H	10.00	17	50.00	0	100.0	5	1000	2	10000	0	20000	0
Selenium	H	0.100	-1	0.500	-3	1.000	5	10.00	3	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 METALS Water
EPA 6020

Inst : MET26
Calnum : 1019380797001 Cal Date : 21-SEP-2009

ICV 1019380797012 (09i21k00012 21-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10360	ug/L	4	10	
Antimony	A	100.0	103.8	ug/L	4	10	
Barium	A	100.0	96.96	ug/L	-3	10	
Beryllium	A	100.0	97.87	ug/L	-2	10	
Cadmium	A	100.0	95.40	ug/L	-5	10	
Calcium	A	10000	10090	ug/L	1	10	
Lead	A	100.0	101.7	ug/L	2	10	
Magnesium	A	10000	10280	ug/L	3	10	
Molybdenum	A	100.0	101.7	ug/L	2	10	
Potassium	A	10000	10330	ug/L	3	10	
Silver	A	100.0	107.8	ug/L	8	10	
Thallium	A	50.00	51.42	ug/L	3	10	
Arsenic	E	100.0	100.4	ug/L	0	10	
Chromium	E	100.0	99.20	ug/L	-1	10	
Cobalt	E	100.0	97.11	ug/L	-3	10	
Copper	E	100.0	99.15	ug/L	-1	10	
Manganese	E	100.0	97.68	ug/L	-2	10	
Nickel	E	100.0	99.46	ug/L	-1	10	
Sodium	E	10000	9922	ug/L	-1	10	
Vanadium	E	100.0	98.61	ug/L	-1	10	
Zinc	E	100.0	99.59	ug/L	0	10	
Iron	H	10000	10120	ug/L	1	10	
Selenium	H	100.0	101.5	ug/L	2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797013.1 File : 09i21k00013 Time : 21-SEP-2009 12:36
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	[0.05110]	0.1000	0.03964	ug/L	!ib
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.07070]	0.1000	0.01307	ug/L	!ib
Potassium	A	14.77	10.00	5.867	ug/L	ib ***
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03730]	0.05000	0.01103	ug/L	!ib
Arsenic	E	[0.04740]	0.1000	0.04565	ug/L	!ib
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1466481	-1.88
Scandium	A	4898830	4468881	-8.78
Scandium	E	45610	46190	1.27
Scandium	H	1140935	1253932	9.90
Germanium	H	313689	339774	8.32
Germanium	E	35119	35435	0.90
Indium	A	5839369	5345762	-8.45
Bismuth	A	3579773	3362475	-6.07
Yttrium	A	6860220	6310929	-8.01
Terbium	A	6802972	6245256	-8.20

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797086 File : 09i21k00086 Time : 22-SEP-2009 00:51
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0041	10000	9725	ug/L	-3	10	
Antimony	A	0.0033	0.0028	100.0	104.6	ug/L	5	10	
Barium	A	9.1E-4	7.5E-4	100.0	92.46	ug/L	-8	10	
Beryllium	A	0.0028	0.0028	100.0	104.3	ug/L	4	10	
Cadmium	A	7.2E-4	6.6E-4	100.0	96.49	ug/L	-4	10	
Calcium	A	3.9E-4	1.8E-4	10000	9976	ug/L	0	10	
Lead	A	0.0073	0.0049	100.0	103.3	ug/L	3	10	
Magnesium	A	0.0036	0.0030	10000	9542	ug/L	-5	10	
Molybdenum	A	0.0019	0.0018	100.0	101.4	ug/L	1	10	
Potassium	A	0.0236	0.0057	10000	10010	ug/L	0	10	
Silver	A	0.0035	0.0035	100.0	107.3	ug/L	7	10	
Thallium	A	0.0071	0.0070	50.00	51.29	ug/L	3	10	
Arsenic	E	0.0064	0.0060	100.0	104.3	ug/L	4	10	
Chromium	E	0.0755	0.0464	100.0	105.0	ug/L	5	10	
Cobalt	E	0.0871	0.0875	100.0	104.0	ug/L	4	10	
Copper	E	0.1441	0.0907	100.0	102.2	ug/L	2	10	
Manganese	E	0.0176	0.0151	100.0	101.4	ug/L	1	10	
Nickel	E	0.0293	0.0255	100.0	106.1	ug/L	6	10	
Sodium	E	0.0097	0.0041	10000	10160	ug/L	2	10	
Vanadium	E	0.0383	0.0342	100.0	103.5	ug/L	4	10	
Zinc	E	0.0331	0.0094	100.0	103.7	ug/L	4	10	
Iron	H	0.0084	0.0076	10000	10230	ug/L	2	10	
Selenium	H	0.0010	0.0010	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1173381	-21.49
Scandium	A	4898830	4438682	-9.39
Scandium	E	45610	40091	-12.10
Scandium	H	1140935	1189267	4.24
Germanium	H	313689	318022	1.38
Germanium	E	35119	32168	-8.40
Indium	A	5839369	5456165	-6.56
Bismuth	A	3579773	3596411	0.46
Yttrium	A	6860220	6417696	-6.45
Terbium	A	6802972	6795017	-0.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797087 File : 09i21k00087 Time : 22-SEP-2009 01:01
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.05490]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02820]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1136684	-23.95
Scandium	A	4898830	4386394	-10.46
Scandium	E	45610	41733	-8.50
Scandium	H	1140935	1178133	3.26
Germanium	H	313689	319252	1.77
Germanium	E	35119	33461	-4.72
Indium	A	5839369	5538920	-5.15
Bismuth	A	3579773	3708324	3.59
Yttrium	A	6860220	6415528	-6.48
Terbium	A	6802972	6770996	-0.47

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797089.1 File : 09i21k00089 Time : 22-SEP-2009 01:22
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2830	0.1000	ug/L	!a+
Barium	A	1.322	0.1000	ug/L	!a+
Beryllium	A	[0.02030]	0.1000	ug/L	
Cadmium	A	2.721	0.1000	ug/L	!a+
Lead	A	1.298	0.1000	ug/L	!a+
Silver	A	0.1799	0.1000	ug/L	!a+
Thallium	A	0.08210	0.05000	ug/L	!a+
Arsenic	E	0.3507	0.1000	ug/L	!a+
Chromium	E	1.138	0.1000	ug/L	!a+
Cobalt	E	3.720	0.1000	ug/L	!a+
Copper	E	5.962	0.1000	ug/L	!a+
Manganese	E	6.198	0.1000	ug/L	!a+
Nickel	E	3.788	0.1000	ug/L	!a+
Vanadium	E	[0.03170]	0.1000	ug/L	
Zinc	E	6.387	0.1000	ug/L	!a+
Selenium	H	0.2304	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102000	ug/L	102
Calcium	A	300000	316400	ug/L	105
Magnesium	A	100000	98440	ug/L	98
Molybdenum	A	2000	2034	ug/L	102
Potassium	A	100000	0	ug/L	0
Sodium	E	250000	244700	ug/L	98
Iron	H	250000	258800	ug/L	104

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1099702	-26.42
Scandium	A	4898830	4392536	-10.33
Scandium	E	45610	43032	-5.65
Scandium	H	1140935	1181987	3.60
Germanium	H	313689	306590	-2.26
Germanium	E	35119	34013	-3.15
Indium	A	5839369	4947406	-15.27
Bismuth	A	3579773	2964750	-17.18
Yttrium	A	6860220	6265393	-8.67
Terbium	A	6802972	6306760	-7.29

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797090.1 File : 09i21k00090 Time : 22-SEP-2009 01:32
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105800	ug/L	6		
Cadmium	A	100.0	104.2	ug/L	4	20	
Calcium	A	300000	324500	ug/L	8		
Magnesium	A	100000	101600	ug/L	2		
Molybdenum	A	2000	2073	ug/L	4		
Potassium	A	100000	0	ug/L	-100		sat ***
Silver	A	50.00	54.71	ug/L	9	20	
Arsenic	E	100.0	110.3	ug/L	10	20	
Chromium	E	200.0	217.0	ug/L	9	20	
Cobalt	E	200.0	213.5	ug/L	7	20	
Copper	E	200.0	193.0	ug/L	-3	20	
Manganese	E	200.0	217.2	ug/L	9	20	
Nickel	E	200.0	203.3	ug/L	2	20	
Sodium	E	250000	257200	ug/L	3		
Vanadium	E	200.0	218.2	ug/L	9	20	
Zinc	E	100.0	100.9	ug/L	1	20	
Iron	H	250000	263200	ug/L	5		
Selenium	H	100.0	110.9	ug/L	11	20	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1140935	1173491	2.85
Scandium	A	4898830	4359663	-11.01
Scandium	E	45610	41204	-9.66
Germanium	H	313689	305658	-2.56
Germanium	E	35119	32926	-6.24
Indium	A	5839369	4917195	-15.79
Yttrium	A	6860220	6236438	-9.09

sat=saturated

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797102 File : 09i21k00102 Time : 22-SEP-2009 03:34
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0041	10000	9813	ug/L	-2	10	
Antimony	A	0.0033	0.0028	100.0	104.1	ug/L	4	10	
Barium	A	9.1E-4	7.4E-4	100.0	91.47	ug/L	-9	10	
Beryllium	A	0.0028	0.0027	100.0	99.53	ug/L	0	10	
Cadmium	A	7.2E-4	6.5E-4	100.0	95.21	ug/L	-5	10	
Calcium	A	3.9E-4	1.7E-4	10000	9893	ug/L	-1	10	
Lead	A	0.0073	0.0051	100.0	107.0	ug/L	7	10	
Magnesium	A	0.0036	0.0031	10000	9683	ug/L	-3	10	
Molybdenum	A	0.0019	0.0018	100.0	101.2	ug/L	1	10	
Potassium	A	0.0236	0.0057	10000	9933	ug/L	-1	10	
Silver	A	0.0035	0.0035	100.0	107.4	ug/L	7	10	
Thallium	A	0.0071	0.0069	50.00	50.42	ug/L	1	10	
Arsenic	E	0.0064	0.0058	100.0	100.7	ug/L	1	10	
Chromium	E	0.0755	0.0447	100.0	101.2	ug/L	1	10	
Cobalt	E	0.0871	0.0851	100.0	101.2	ug/L	1	10	
Copper	E	0.1441	0.0882	100.0	99.38	ug/L	-1	10	
Manganese	E	0.0176	0.0146	100.0	97.71	ug/L	-2	10	
Nickel	E	0.0293	0.0248	100.0	103.3	ug/L	3	10	
Sodium	E	0.0097	0.0040	10000	9854	ug/L	-1	10	
Vanadium	E	0.0383	0.0329	100.0	99.51	ug/L	0	10	
Zinc	E	0.0331	0.0091	100.0	100.3	ug/L	0	10	
Iron	H	0.0084	0.0076	10000	10190	ug/L	2	10	
Selenium	H	0.0010	0.0010	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1250163	-16.35
Scandium	A	4898830	4252807	-13.19
Scandium	E	45610	38314	-16.00
Scandium	H	1140935	1115748	-2.21
Germanium	H	313689	300777	-4.12
Germanium	E	35119	30826	-12.22
Indium	A	5839369	5211200	-10.76
Bismuth	A	3579773	3641773	1.73
Yttrium	A	6860220	6102004	-11.05
Terbium	A	6802972	6599765	-2.99

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797103 File : 09i21k00103 Time : 22-SEP-2009 03:44
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.07530]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03590]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1246835	-16.58
Scandium	A	4898830	4205431	-14.15
Scandium	E	45610	38877	-14.76
Scandium	H	1140935	1117864	-2.02
Germanium	H	313689	302778	-3.48
Germanium	E	35119	31720	-9.68
Indium	A	5839369	5334895	-8.64
Bismuth	A	3579773	3724199	4.03
Yttrium	A	6860220	6116773	-10.84
Terbium	A	6802972	6620688	-2.68

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797114 File : 09i21k00114 Time : 22-SEP-2009 05:35
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0041	10000	9745	ug/L	-3	10	
Antimony	A	0.0033	0.0027	100.0	102.8	ug/L	3	10	
Barium	A	9.1E-4	7.4E-4	100.0	91.35	ug/L	-9	10	
Beryllium	A	0.0028	0.0026	100.0	98.73	ug/L	-1	10	
Cadmium	A	7.2E-4	6.5E-4	100.0	95.04	ug/L	-5	10	
Calcium	A	3.9E-4	1.8E-4	10000	9982	ug/L	0	10	
Lead	A	0.0073	0.0050	100.0	106.5	ug/L	7	10	
Magnesium	A	0.0036	0.0031	10000	9656	ug/L	-3	10	
Molybdenum	A	0.0019	0.0019	100.0	101.8	ug/L	2	10	
Potassium	A	0.0236	0.0057	10000	9961	ug/L	0	10	
Silver	A	0.0035	0.0034	100.0	106.9	ug/L	7	10	
Thallium	A	0.0071	0.0069	50.00	50.48	ug/L	1	10	
Arsenic	E	0.0064	0.0059	100.0	102.3	ug/L	2	10	
Chromium	E	0.0755	0.0454	100.0	102.8	ug/L	3	10	
Cobalt	E	0.0871	0.0863	100.0	102.5	ug/L	3	10	
Copper	E	0.1441	0.0894	100.0	100.7	ug/L	1	10	
Manganese	E	0.0176	0.0149	100.0	99.63	ug/L	0	10	
Nickel	E	0.0293	0.0251	100.0	104.6	ug/L	5	10	
Sodium	E	0.0097	0.0041	10000	10080	ug/L	1	10	
Vanadium	E	0.0383	0.0337	100.0	101.9	ug/L	2	10	
Zinc	E	0.0331	0.0092	100.0	101.7	ug/L	2	10	
Iron	H	0.0084	0.0076	10000	10130	ug/L	1	10	
Selenium	H	0.0010	0.0010	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1263369	-15.47
Scandium	A	4898830	4316134	-11.89
Scandium	E	45610	38523	-15.54
Scandium	H	1140935	1143359	0.21
Germanium	H	313689	306637	-2.25
Germanium	E	35119	30943	-11.89
Indium	A	5839369	5297768	-9.27
Bismuth	A	3579773	3647734	1.90
Yttrium	A	6860220	6210281	-9.47
Terbium	A	6802972	6665422	-2.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797115 File : 09i21k00115 Time : 22-SEP-2009 05:45
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.06330]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03540]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1250314	-16.34
Scandium	A	4898830	4307424	-12.07
Scandium	E	45610	39198	-14.06
Scandium	H	1140935	1206436	5.74
Germanium	H	313689	323432	3.11
Germanium	E	35119	32076	-8.66
Indium	A	5839369	5415642	-7.26
Bismuth	A	3579773	3747453	4.68
Yttrium	A	6860220	6238419	-9.06
Terbium	A	6802972	6740928	-0.91

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797128.1 File : 09i21k00128 Time : 22-SEP-2009 07:55
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0040	10000	9677	ug/L	-3	10	
Antimony	A	0.0033	0.0028	100.0	104.2	ug/L	4	10	
Barium	A	9.1E-4	7.3E-4	100.0	90.22	ug/L	-10	10	
Beryllium	A	0.0028	0.0027	100.0	100.6	ug/L	1	10	
Cadmium	A	7.2E-4	6.5E-4	100.0	95.21	ug/L	-5	10	
Calcium	A	3.9E-4	1.7E-4	10000	9898	ug/L	-1	10	
Lead	A	0.0073	0.0050	100.0	106.9	ug/L	7	10	
Magnesium	A	0.0036	0.0030	10000	9520	ug/L	-5	10	
Molybdenum	A	0.0019	0.0019	100.0	102.2	ug/L	2	10	
Potassium	A	0.0236	0.0056	10000	9844	ug/L	-2	10	
Silver	A	0.0035	0.0034	100.0	106.1	ug/L	6	10	
Thallium	A	0.0071	0.0070	50.00	50.62	ug/L	1	10	
Arsenic	E	0.0064	0.0057	100.0	98.54	ug/L	-1	10	
Chromium	E	0.0755	0.0445	100.0	100.8	ug/L	1	10	
Cobalt	E	0.0871	0.0849	100.0	100.9	ug/L	1	10	
Copper	E	0.1441	0.0866	100.0	97.57	ug/L	-2	10	
Manganese	E	0.0176	0.0144	100.0	96.93	ug/L	-3	10	
Nickel	E	0.0293	0.0248	100.0	103.4	ug/L	3	10	
Sodium	E	0.0097	0.0040	10000	9902	ug/L	-1	10	
Vanadium	E	0.0383	0.0330	100.0	99.62	ug/L	0	10	
Zinc	E	0.0331	0.0089	100.0	98.63	ug/L	-1	10	
Iron	H	0.0084	0.0076	10000	10150	ug/L	2	10	
Selenium	H	0.0010	0.0010	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1207603	-19.20
Scandium	A	4898830	4181091	-14.65
Scandium	E	45610	37053	-18.76
Scandium	H	1140935	1097416	-3.81
Germanium	H	313689	293363	-6.48
Germanium	E	35119	30248	-13.87
Indium	A	5839369	5146606	-11.86
Bismuth	A	3579773	3638752	1.65
Yttrium	A	6860220	6001993	-12.51
Terbium	A	6802972	6576386	-3.33

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797129.1 File : 09i21k00129 Time : 22-SEP-2009 08:05
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.06160]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03690]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1212695	-18.86
Scandium	A	4898830	4152660	-15.23
Scandium	E	45610	37561	-17.65
Scandium	H	1140935	1082374	-5.13
Germanium	H	313689	294035	-6.27
Germanium	E	35119	30547	-13.02
Indium	A	5839369	5231347	-10.41
Bismuth	A	3579773	3716238	3.81
Yttrium	A	6860220	5972446	-12.94
Terbium	A	6802972	6561312	-3.55

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797139.1 File : 09i21k00139 Time : 22-SEP-2009 09:51
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2947	0.1000	ug/L	!a+
Barium	A	1.314	0.1000	ug/L	!a+
Beryllium	A	[0.01980]	0.1000	ug/L	
Cadmium	A	2.689	0.1000	ug/L	!a+
Lead	A	1.321	0.1000	ug/L	!a+
Silver	A	0.1695	0.1000	ug/L	!a+
Thallium	A	0.09070	0.05000	ug/L	!a+
Arsenic	E	0.3589	0.1000	ug/L	!a+
Chromium	E	1.123	0.1000	ug/L	!a+
Cobalt	E	3.799	0.1000	ug/L	!a+
Copper	E	5.295	0.1000	ug/L	!a+
Manganese	E	6.211	0.1000	ug/L	!a+
Nickel	E	3.916	0.1000	ug/L	!a+
Vanadium	E	[0.01950]	0.1000	ug/L	
Zinc	E	6.251	0.1000	ug/L	!a+
Selenium	H	0.2236	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100900	ug/L	101
Calcium	A	300000	311900	ug/L	104
Magnesium	A	100000	97070	ug/L	97
Molybdenum	A	2000	2025	ug/L	101
Potassium	A	100000	102900	ug/L	103
Sodium	E	250000	249900	ug/L	100
Iron	H	250000	255600	ug/L	102

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1047614	-29.91
Scandium	A	4898830	4121953	-15.86
Scandium	E	45610	37594	-17.58
Scandium	H	1140935	1076203	-5.67
Germanium	H	313689	276252	-11.93
Germanium	E	35119	30473	-13.23
Indium	A	5839369	4652590	-20.32
Bismuth	A	3579773	2965040	-17.17
Yttrium	A	6860220	5883713	-14.23
Terbium	A	6802972	6025051	-11.44

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797140.1 File : 09i21k00140 Time : 22-SEP-2009 10:02
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104100	ug/L	4		
Cadmium	A	100.0	103.5	ug/L	4	20	
Calcium	A	300000	321700	ug/L	7		
Magnesium	A	100000	101100	ug/L	1		
Molybdenum	A	2000	2077	ug/L	4		
Potassium	A	100000	105000	ug/L	5		
Silver	A	50.00	54.53	ug/L	9	20	
Arsenic	E	100.0	108.2	ug/L	8	20	
Chromium	E	200.0	214.1	ug/L	7	20	
Cobalt	E	200.0	205.0	ug/L	3	20	
Copper	E	200.0	192.2	ug/L	-4	20	
Manganese	E	200.0	212.8	ug/L	6	20	
Nickel	E	200.0	202.1	ug/L	1	20	
Sodium	E	250000	255500	ug/L	2		
Vanadium	E	200.0	214.9	ug/L	7	20	
Zinc	E	100.0	99.83	ug/L	0	20	
Iron	H	250000	263100	ug/L	5		
Selenium	H	100.0	111.8	ug/L	12	20	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1140935	1082306	-5.14
Scandium	A	4898830	4116974	-15.96
Scandium	E	45610	37883	-16.94
Germanium	H	313689	280596	-10.55
Germanium	E	35119	30367	-13.53
Indium	A	5839369	4631871	-20.68
Yttrium	A	6860220	5855221	-14.65

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69382287

Instrument : MET06 Begun : 09/22/09 11:27
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i22l00001	TUN				09/22/09 11:27	1.0	1	
002	09i22l00002	X	RINSE			09/22/09 11:34	1.0	2	
003	09i22l00003	ICALBLK	CALBLANK			09/22/09 11:45	1.0	2	
004	09i22l00004	ICAL				09/22/09 11:55	1.0	3 2	
005	09i22l00005	ICAL				09/22/09 12:05	1.0	4 2	
006	09i22l00006	ICAL				09/22/09 12:17	1.0	5 2	
007	09i22l00007	ICAL				09/22/09 12:27	1.0	6 2	
008	09i22l00008	ICAL				09/22/09 12:37	1.0	7 2	
009	09i22l00009	ICAL				09/22/09 12:48	1.0	8 2	
010	09i22l00010	ICV				09/22/09 12:58	1.0	9 2	
011	09i22l00011	ICB				09/22/09 13:08	1.0	2	
012	09i22l00012	ICSA				09/22/09 13:19	1.0	10 2	7:CA=280000
013	09i22l00013	X				09/22/09 13:29	1.0	11 2	10:CA=280000
014	09i22l00014	ICSAB				09/22/09 13:39	1.0	11 2	11:CA=290000
015	09i22l00015	X	RINSE			09/22/09 13:50	1.0	2	
016	09i22l00016	X	RINSE			09/22/09 14:00	1.0	2	
017	09i22l00017	BLANK	QC512570	Water	155040	09/22/09 14:11	5.0	2	
018	09i22l00018	BS	QC512571	Water	155040	09/22/09 14:21	5.0	2	
019	09i22l00019	BSD	QC512572	Water	155040	09/22/09 14:32	5.0	2	
020	09i22l00020	MSS	214809-001	Water	155040	09/22/09 14:42	5.0	2	
021	09i22l00021	SER	QC512575	Water	155040	09/22/09 14:52	25.0	2	
022	09i22l00022	MS	QC512573	Water	155040	09/22/09 15:03	5.0	2	
023	09i22l00023	MSD	QC512574	Water	155040	09/22/09 15:13	5.0	2	
024	09i22l00024	CCV				09/22/09 15:23	1.0	12 2	
025	09i22l00025	X				09/22/09 15:34	1.0	12 2	
026	09i22l00026	CCB				09/22/09 15:44	1.0	2	
027	09i22l00027	PDS	QC512576	Water	155040	09/22/09 15:54	5.0	13 14 2	
028	09i22l00028	MSS	214809-002	Water	155040	09/22/09 16:04	5.0	2	
029	09i22l00029	CCV				09/22/09 16:15	1.0	12 2	
030	09i22l00030	X				09/22/09 16:25	1.0	2	
031	09i22l00031	CCB				09/22/09 16:32	1.0	2	
032	09i22l00032	MS	QC512577	Water	155040	09/22/09 16:42	5.0	2	
033	09i22l00033	MSD	QC512578	Water	155040	09/22/09 16:52	5.0	2	
034	09i22l00034	SAMPLE	214940-002	Water	155040	09/22/09 17:03	5.0	2	
035	09i22l00035	SAMPLE	214940-003	Water	155040	09/22/09 17:13	5.0	2	
036	09i22l00036	SAMPLE	214940-004	Water	155040	09/22/09 17:24	5.0	2	
037	09i22l00037	CCV				09/22/09 17:34	1.0	12 2	
038	09i22l00038	X				09/22/09 17:44	1.0	2	
039	09i22l00039	CCB				09/22/09 17:55	1.0	2	
040	09i22l00040	BLANK	QC512570	Water	155040	09/22/09 18:05	5.0	2	
041	09i22l00041	BS	QC512571	Water	155040	09/22/09 18:16	5.0	2	
042	09i22l00042	BSD	QC512572	Water	155040	09/22/09 18:26	5.0	2	
043	09i22l00043	MSS	214809-001	Water	155040	09/22/09 18:36	5.0	2	
044	09i22l00044	SER	QC512575	Water	155040	09/22/09 18:47	25.0	2	
045	09i22l00045	MS	QC512573	Water	155040	09/22/09 18:57	5.0	2	
046	09i22l00046	MSD	QC512574	Water	155040	09/22/09 19:07	5.0	2	
047	09i22l00047	PDS	QC512576	Water	155040	09/22/09 19:18	5.0	13 14 2	
048	09i22l00048	MSS	214809-002	Water	155040	09/22/09 19:28	5.0	2	
049	09i22l00049	BLANK	QC512723	Filtrate	155082	09/22/09 19:39	5.0	2	
050	09i22l00050	CCV				09/22/09 19:49	1.0	12 2	
051	09i22l00051	X				09/22/09 19:59	1.0	2	
052	09i22l00052	CCB				09/22/09 20:10	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69382287

Instrument : MET06 Begun : 09/22/09 11:27
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i22l00053	SAMPLE	214982-001	Filtrate	155082	09/22/09 20:20	5.0	2	
054	09i22l00054	SAMPLE	214982-002	Filtrate	155082	09/22/09 20:30	5.0	2	
055	09i22l00055	SAMPLE	214982-003	Filtrate	155082	09/22/09 20:41	5.0	2	
056	09i22l00056	SAMPLE	214982-004	Filtrate	155082	09/22/09 20:51	5.0	2	
057	09i22l00057	SAMPLE	214982-005	Filtrate	155082	09/22/09 21:02	5.0	2	
058	09i22l00058	SAMPLE	214982-006	Filtrate	155082	09/22/09 21:12	5.0	2	
059	09i22l00059	MSS	214982-007	Filtrate	155082	09/22/09 21:22	5.0	2	
060	09i22l00060	SAMPLE	214982-008	Filtrate	155082	09/22/09 21:33	5.0	2	
061	09i22l00061	TUN				09/22/09 21:44	1.0	1	
062	09i22l00062	X	RINSE			09/22/09 21:51	1.0	2	
063	09i22l00063	SAMPLE	214982-009	Filtrate	155082	09/22/09 22:01	5.0	2	
064	09i22l00064	CCV				09/22/09 22:12	1.0	12 2	
065	09i22l00065	X				09/22/09 22:22	1.0	2	
066	09i22l00066	CCB				09/22/09 22:32	1.0	2	
067	09i22l00067	ICSA				09/22/09 22:43	1.0	10 2	7:CA=290000
068	09i22l00068	ICSAB				09/22/09 22:53	1.0	11 2	11:CA=280000
069	09i22l00069	X	RINSE			09/22/09 23:03	1.0	2	
070	09i22l00070	X	RINSE			09/22/09 23:14	1.0	2	
071	09i22l00071	X	RINSE			09/22/09 23:24	1.0	2	
072	09i22l00072	X	RINSE			09/22/09 23:34	1.0	2	
073	09i22l00073	X	RINSE			09/22/09 23:45	1.0	2	

JYF 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 68.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 69382287

Date : 09/22/09 Reference : 09i22l00003
Sequence : MET06 09i22l00 Analyzed : 09/22/09 11:45

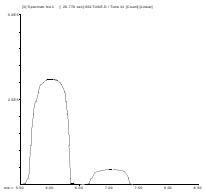
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	3421307	2109018	22341	632070	139223	13309	3575408	4485641	3188793	6094388
		LOWER LIMIT	1026392	632705	6702	189621	41767	3993	1072622	1345692	956638	1828316
		UPPER LIMIT	4105568	2530822	26809	758484	167068	15971	4290490	5382769	3826552	7313266
011	ICB		3267843	1939408	23299	636188	151745	15320	3400078	4380134	2975513	5877327
012	ICSA		1348211	1031887	13154	379755	110869	11162	1917432	2402978	1703563	3660023
014	ICSAB		1034049	851438	10689	297972	81005	7969	1950802	2547057	1655792	3872338
017	BLANK	QC512570	1167077	1081878	12679	341977	97507	10265	3185450	4953254	2488132	6275307
018	BS	QC512571	1188091	1068450	13165	355124	100815	10807	3069941	4666219	2398394	6065603
019	BSD	QC512572	1206586	1094220	13928	366559	103386	11156	3111879	4721331	2478704	6179790
020	MSS	214809-001	1206404	1126397	13411	362560	102252	10934	3184534	4877799	2539458	6326226
021	SER	QC512575	1188824	1074819	13035	360841	102725	10631	3099981	4773916	2406475	6126754
022	MS	QC512573	1213233	1108661	13568	372115	102659	10925	3093848	4628064	2466708	6205761
023	MSD	QC512574	1248396	1122403	13989	375489	103180	10974	3079765	4635594	2489884	6182940
024	CCV		1293454	1130378	14674	382273	103231	11209	2931305	4263699	2406324	5877503
026	CCB		1437528	1215099	15513	408128	110983	11958	3157637	4709667	2551710	6139353
027	PDS	QC512576	1388073	1204918	15456	401901	106017	11421	2998203	4263204	2478203	5952872
028	MSS	214809-002	1448190	1233275	15882	415657	110796	12194	3195610	4715381	2569847	6206265
029	CCV		1446239	1229031	15830	409225	105879	11726	3001814	4233239	2515076	5934042
031	CCB		1542778	1276082	16434	425075	112475	12364	3216376	4664083	2608389	6116758
032	MS	QC512577	1441710	1207080	15915	418904	109946	11905	3022723	4313202	2468456	5940973
033	MSD	QC512578	1533064	1289726	16446	422553	110744	12183	3175353	4463416	2621134	6103215
034	SAMPLE	214940-002	1466076	1241137	16601	434013	113391	12520	3075515	4304707	2531707	5937527
035	SAMPLE	214940-003	1574773	1293157	17195	434526	115446	12734	3249303	4674100	2638781	6222725
036	SAMPLE	214940-004	1501361	1232802	16612	431332	113489	12515	3082707	4400745	2508734	5996077
037	CCV		1476221	1215166	15642	416766	106859	11568	2924361	4076676	2462418	5734481
039	CCB		1648161	1322985	17705	444201	116025	13015	3178811	4533980	2618345	5969703
040	BLANK	QC512570	1728651	1407906	17808	438200	115124	13063	3302093	4633926	2725158	6205269
041	BS	QC512571	1782303	1418838	18010	445566	114891	13043	3280558	4552541	2767196	6296812
042	BSD	QC512572	1700615	1355841	18065	442997	114210	13044	3134332	4340205	2610907	5913839
043	MSS	214809-001	1641764	1298093	17135	428457	111667	12609	3106553	4395666	2568546	5895294
044	SER	QC512575	1658321	1314394	17471	440210	115734	12878	3185360	4561193	2614322	6063810
045	MS	QC512573	1621698	1294972	16837	435915	111655	12415	3068649	4369307	2550512	5939743
046	MSD	QC512574	1631457	1305349	17606	432814	111239	12917	3076689	4368314	2570919	5956421
047	PDS	QC512576	1579365	1248698	16668	431569	109717	12102	2906089	4040859	2455711	5649258
048	MSS	214809-002	1701160	1313984	16940	428849	112120	12467	3169498	4553820	2596357	6063266
049	BLANK	QC512723	1602563	1262951	17266	414834	110413	12780	3112042	4470251	2547373	5911657
050	CCV		1575364	1254876	17071	429612	109042	12489	2942588	4046735	2468048	5710896
052	CCB		1698733	1341832	17797	452488	116696	13174	3180172	4511722	2640790	6041386
053	SAMPLE	214982-001	1643184	1335857	17684	433929	113726	13105	3200477	4580881	2627158	6088332
054	SAMPLE	214982-002	1625590	1299742	17291	429848	113423	12983	3172021	4534841	2589262	5974556
055	SAMPLE	214982-003	1605885	1275238	17321	426930	111803	12957	3140872	4466719	2565350	5926295
056	SAMPLE	214982-004	1664802	1332253	17438	428155	112309	12899	3239104	4528897	2657057	6009351
057	SAMPLE	214982-005	1586682	1289535	17514	430819	114218	13223	3188646	4521156	2597451	5942041
058	SAMPLE	214982-006	1640698	1345473	17988	417867	111445	13489	3252668	4637640	2672351	6081034
059	MSS	214982-007	1611481	1302878	17480	423157	111061	13006	3195246	4556938	2612239	6070720
060	SAMPLE	214982-008	1552430	1245368	16930	410707	108873	12612	3087262	4440454	2517256	5890742
063	SAMPLE	214982-009	1512281	1241608	16826	406718	108515	12185	3090077	4494515	2534119	5882538
064	CCV		1452902	1164175	16019	403605	104079	11809	2805991	3960138	2349292	5478008
066	CCB		1500440	1226555	16390	397308	106766	12471	3048766	4525392	2518317	5916733
067	ICSA		610990 *	584604 *	9310	245229	67926	7645	1755008	2507769	1407715	3673533
068	ICSAB		628341 *	633641	8790	222626	64987	7550	1871466	2647279	1531344	3921011

MET06 QC Tune Report

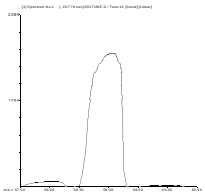
Data File: C:\ICPCHEM\1\DATA\09I22l00.B\001TUNE.D
Date Acquired: Sep 22 2009 11:27 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

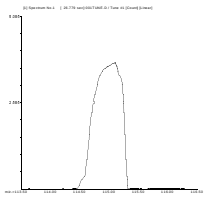
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	256114	255805	256187	253232	0.70	5.00	
59 Co	87017	86413	86258	85901	0.91	5.00	
115 In	2010845	1977966	1981791	1991020	0.69	5.00	
205 Tl	179237	178484	177958	176585	0.92	5.00	



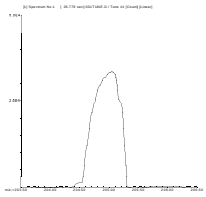
7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



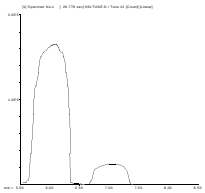
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET06 QC Tune Report

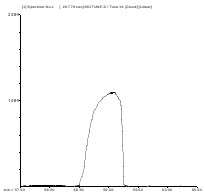
Data File: C:\ICPCHEM\1\DATA\09I22l00.B\061TUNE.D
Date Acquired: Sep 22 2009 09:44 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

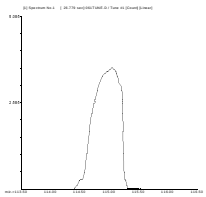
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	131073	130432	128940	130646	0.19	5.00	
59 Co	59988	58978	59293	58733	1.13	5.00	
115 In	1866828	1823855	1811702	1812972	0.72	5.00	
205 Tl	179583	177603	178875	178444	0.88	5.00	



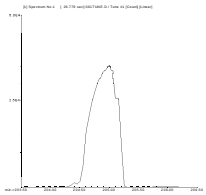
7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 METALS Water: EPA 6020

Inst : MET06 Reviewer : ---
Calnum : 69382287001 Date : 22-SEP-2009 11:45
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i22l00004	69382287004		22-SEP-2009 11:55	S12854, S12847
L2	09i22l00005	69382287005		22-SEP-2009 12:05	S12855, S12847
L3	09i22l00006	69382287006		22-SEP-2009 12:17	S12856, S12847
L4	09i22l00007	69382287007		22-SEP-2009 12:27	S12857, S12847
L5	09i22l00008	69382287008		22-SEP-2009 12:37	S12852, S12847
L6	09i22l00009	69382287009		22-SEP-2009 12:48	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0462	0.0078	0.0073	0.0072	0.0067	0.0066	BLNK	-18.836	150.520		0.0136	1.000	0.995	
Antimony	A	0.0060	0.0026	0.0026	0.0027	0.0026	0.0027	BLNK	-0.0362	379.309		0.0032	1.000	0.995	
Barium	A	0.0012	7.2E-4	6.5E-4	6.3E-4	5.7E-4	5.7E-4	BLNK	-0.0650	1746.93		7.2E-4	1.000	0.995	
Beryllium	A	0.0028	0.0025	0.0025	0.0026	0.0024	0.0025	BLNK	-0.0341	401.484		0.0026	1.000	0.995	
Cadmium	A	0.0010	8.2E-4	8.2E-4	8.8E-4	8.1E-4	8.1E-4	BLNK	-0.0513	1240.57		8.6E-4	1.000	0.995	
Calcium	A	6.2E-4	2.9E-4	2.4E-4	2.2E-4	2.0E-4	2.0E-4	BLNK	-52.806	5043.60		3.0E-4	1.000	0.995	
Lead	A	0.0116	0.0082	0.0080	0.0082	0.0076	0.0075	BLNK	-0.0667	132.922		0.0085	1.000	0.995	
Magnesium	A	0.0086	0.0065	0.0061	0.0062	0.0058	0.0057	BLNK	-21.538	175.079		0.0065	1.000	0.995	
Molybdenum	A	0.0029	0.0021	0.0022	0.0023	0.0021	0.0022	BLNK	-0.2857	460.228		0.0023	1.000	0.995	
Potassium	A	0.0722	0.0199	0.0131	0.0074	0.0062	0.0062	BLNK	-122.77	162.821		0.0208	1.000	0.995	
Silver	A	0.0047	0.0035	0.0036	0.0037	0.0034	0.0034	BLNK	-0.0346	294.101		0.0037	1.000	0.995	
Thallium	A	0.0103	0.0078	0.0077	0.0080	0.0078	0.0079	BLNK	-0.0394	126.793		0.0083	1.000	0.995	
Arsenic	E	0.0079	0.0054	0.0059	0.0053	0.0054	0.0052	BLNK	-0.0507	190.314		0.0058	1.000	0.995	
Chromium	E	0.1422	0.0559	0.0510	0.0436	0.0419	0.0420	BLNK	-0.1550	23.8555		0.0628	1.000	0.995	
Cobalt	E	0.0944	0.0806	0.0795	0.0776	0.0738	0.0729	BLNK	-0.0605	13.6902		0.0798	1.000	0.995	
Copper	E	0.2504	0.1316	0.1221	0.1044	0.0996	0.0964	BLNK	-0.1240	10.3083		0.1341	1.000	0.995	
Manganese	E	0.0393	0.0213	0.0199	0.0182	0.0176	0.0175	BLNK	-0.2297	57.1521		0.0223	1.000	0.995	
Nickel	E	0.0325	0.0258	0.0231	0.0221	0.0209	0.0206	BLNK	-0.0857	48.4347		0.0242	1.000	0.995	
Sodium	E	0.0402	0.0154	0.0118	0.0092	0.0088	0.0087	BLNK	-128.33	115.928		0.0157	1.000	0.995	
Vanadium	E	0.0851	0.0384	0.0332	0.0295	0.0288	0.0290	BLNK	-0.1886	34.5955		0.0407	1.000	0.995	
Zinc	E	0.2350	0.0708	0.0387	0.0155	0.0135	0.0125	BLNK	-0.3743	78.6725		0.0643	0.998	0.995	
Iron	H	0.0140	0.0093	0.0096	0.0084	0.0081	0.0081	BLNK	-41.946	124.013		0.0096	1.000	0.995	
Selenium	H	0.0016	0.0014	0.0016	0.0014	0.0014	0.0013	BLNK	-0.0553	737.353		0.0015	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	407	50.00	-21	100.0	-9	1000	7	10000	1	20000	0
Antimony	A	0.100	93	0.500	-9	1.000	-5	10.00	3	100.0	-3	200.0	1
Barium	A	0.100	39	0.500	13	1.000	6	10.00	9	100.0	-1	200.0	0
Beryllium	A	0.100	-21	0.500	-5	1.000	-3	10.00	4	100.0	-2	200.0	0
Cadmium	A	0.100	-24	0.500	-8	1.000	-3	10.00	8	100.0	0	200.0	0
Calcium	A	10.00	-314	50.00	-60	100.0	-32	1000	6	10000	1	20000	0
Lead	A	0.100	-12	0.500	-5	1.000	0	10.00	9	100.0	1	200.0	0
Magnesium	A	10.00	-165	50.00	-29	100.0	-15	1000	7	10000	1	20000	0
Molybdenum	A	0.100	-250	0.500	-58	1.000	-29	10.00	2	100.0	-2	200.0	1
Potassium	A	10.00	-152	50.00	-21	100.0	-10	1000	9	10000	0	20000	0
Silver	A	0.100	2	0.500	-3	1.000	4	10.00	9	100.0	1	200.0	0
Thallium	A	0.050	-49	0.250	-16	0.500	-10	5.000	0	50.00	-1	100.0	0
Arsenic	E	0.100	0	0.500	-7	1.000	6	10.00	-1	100.0	2	200.0	-1
Chromium	E	0.100	84	0.500	2	1.000	6	10.00	2	100.0	0	200.0	0
Cobalt	E	0.100	-31	0.500	-2	1.000	3	10.00	6	100.0	1	200.0	0
Copper	E	0.100	34	0.500	11	1.000	13	10.00	6	100.0	3	200.0	-1
Manganese	E	0.100	-105	0.500	-24	1.000	-9	10.00	2	100.0	0	200.0	0
Nickel	E	0.100	-28	0.500	8	1.000	3	10.00	6	100.0	1	200.0	0
Sodium	E	10.00	-917	50.00	-178	100.0	-92	1000	-6	10000	0	20000	0
Vanadium	E	0.100	6	0.500	-5	1.000	-4	10.00	0	100.0	-1	200.0	0
Zinc	E	0.100	1375	0.500	382	1.000	167	10.00	18	100.0	6	200.0	-1
Iron	H	10.00	-346	50.00	-69	100.0	-24	1000	0	10000	0	20000	0
Selenium	H	0.100	-36	0.500	-5	1.000	13	10.00	2	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 METALS Water
EPA 6020

Inst : MET06
Calnum : 69382287001 Cal Date : 22-SEP-2009

ICV 69382287010 (09i22l00010 22-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10190	ug/L	2	10	
Antimony	A	100.0	97.94	ug/L	-2	10	
Barium	A	100.0	100.1	ug/L	0	10	
Beryllium	A	100.0	100.4	ug/L	0	10	
Cadmium	A	100.0	99.99	ug/L	0	10	
Calcium	A	10000	9912	ug/L	-1	10	
Lead	A	100.0	99.87	ug/L	0	10	
Magnesium	A	10000	9967	ug/L	0	10	
Molybdenum	A	100.0	97.29	ug/L	-3	10	
Potassium	A	10000	10150	ug/L	2	10	
Silver	A	100.0	105.8	ug/L	6	10	
Thallium	A	50.00	49.57	ug/L	-1	10	
Arsenic	E	100.0	97.09	ug/L	-3	10	
Chromium	E	100.0	100.6	ug/L	1	10	
Cobalt	E	100.0	100.6	ug/L	1	10	
Copper	E	100.0	96.32	ug/L	-4	10	
Manganese	E	100.0	98.48	ug/L	-2	10	
Nickel	E	100.0	101.0	ug/L	1	10	
Sodium	E	10000	9963	ug/L	0	10	
Vanadium	E	100.0	99.59	ug/L	0	10	
Zinc	E	100.0	97.38	ug/L	-3	10	
Iron	H	10000	9997	ug/L	0	10	
Selenium	H	100.0	98.23	ug/L	-2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287011 File : 09i22l00011 Time : 22-SEP-2009 13:08
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Molybdenum	A	ND	0.1000	0.05038	ug/L	
Potassium	A	ND	10.00	5.476	ug/L	
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Cobalt	E	ND	0.1000	0.06395	ug/L	
Copper	E	ND	0.1000	0.07274	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Vanadium	E	ND	0.1000	0.05956	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	3267843	-4.49
Scandium	A	2109018	1939408	-8.04
Scandium	E	22341	23299	4.29
Scandium	H	632070	636188	0.65
Germanium	H	139223	151745	8.99
Germanium	E	13309	15320	15.11
Indium	A	3575408	3400078	-4.90
Bismuth	A	4485641	4380134	-2.35
Yttrium	A	3188793	2975513	-6.69
Terbium	A	6094388	5877327	-3.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287012 File : 09i22l00012 Time : 22-SEP-2009 13:19
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2184	0.1000	ug/L	!a+
Barium	A	1.027	0.1000	ug/L	!a+
Beryllium	A	[-0.006000]	0.1000	ug/L	
Cadmium	A	1.978	0.1000	ug/L	!a+
Lead	A	1.190	0.1000	ug/L	!a+
Silver	A	0.1254	0.1000	ug/L	!a+
Thallium	A	0.06070	0.05000	ug/L	!a+
Arsenic	E	0.1387	0.1000	ug/L	!a+
Chromium	E	1.122	0.1000	ug/L	!a+
Cobalt	E	3.543	0.1000	ug/L	!a+
Copper	E	3.390	0.1000	ug/L	!a+
Manganese	E	6.211	0.1000	ug/L	!a+
Nickel	E	3.559	0.1000	ug/L	!a+
Vanadium	E	[-0.05230]	0.1000	ug/L	
Zinc	E	4.151	0.1000	ug/L	!a+
Selenium	H	[0.09100]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93410	ug/L	93
Calcium	A	300000	284100	ug/L	95
Magnesium	A	100000	90170	ug/L	90
Molybdenum	A	2000	1989	ug/L	99
Potassium	A	100000	95140	ug/L	95
Sodium	E	250000	239100	ug/L	96
Iron	H	250000	246200	ug/L	98

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1348211	-60.59
Scandium	A	2109018	1031887	-51.07
Scandium	E	22341	13154	-41.12
Scandium	H	632070	379755	-39.92
Germanium	H	139223	110869	-20.37
Germanium	E	13309	11162	-16.13
Indium	A	3575408	1917432	-46.37
Bismuth	A	4485641	2402978	-46.43
Yttrium	A	3188793	1703563	-46.58
Terbium	A	6094388	3660023	-39.94

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287014 File : 09i22l00014 Time : 22-SEP-2009 13:39
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	89100	ug/L	-11		
Cadmium	A	100.0	90.09	ug/L	-10	20	
Calcium	A	300000	286700	ug/L	-4		
Magnesium	A	100000	85600	ug/L	-14		
Molybdenum	A	2000	1942	ug/L	-3		
Potassium	A	100000	94240	ug/L	-6		
Silver	A	50.00	42.18	ug/L	-16	20	
Arsenic	E	100.0	86.55	ug/L	-13	20	
Chromium	E	200.0	204.6	ug/L	2	20	
Cobalt	E	200.0	201.1	ug/L	1	20	
Copper	E	200.0	151.9	ug/L	**-24**	20	ab- ***
Manganese	E	200.0	210.6	ug/L	5	20	
Nickel	E	200.0	193.2	ug/L	-3	20	
Sodium	E	250000	215000	ug/L	-14		
Vanadium	E	200.0	205.1	ug/L	3	20	
Zinc	E	100.0	76.50	ug/L	**-23**	20	ab- ***
Iron	H	250000	250300	ug/L	0		
Selenium	H	100.0	82.63	ug/L	-17	20	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	632070	297972	-52.86
Scandium	A	2109018	851438	-59.63
Scandium	E	22341	10689	-52.16
Germanium	H	139223	81005	-41.82
Germanium	E	13309	7969	-40.12
Indium	A	3575408	1950802	-45.44
Yttrium	A	3188793	1655792	-48.07

-=low bias ab=ICSAB

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287029 File : 09i22l00029 Time : 22-SEP-2009 16:15
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0136	0.0060	10000	8998	ug/L	-10	10	
Antimony	A	0.0032	0.0027	100.0	101.3	ug/L	1	10	
Barium	A	7.2E-4	5.4E-4	100.0	94.95	ug/L	-5	10	
Beryllium	A	0.0026	0.0027	100.0	109.3	ug/L	9	10	
Cadmium	A	8.6E-4	8.1E-4	100.0	99.92	ug/L	0	10	
Calcium	A	3.0E-4	2.0E-4	10000	9825	ug/L	-2	10	
Lead	A	0.0085	0.0077	100.0	102.1	ug/L	2	10	
Magnesium	A	0.0065	0.0049	10000	8624	ug/L	**-14**	10	c- ***
Molybdenum	A	0.0023	0.0021	100.0	98.02	ug/L	-2	10	
Potassium	A	0.0208	0.0060	10000	9615	ug/L	-4	10	
Silver	A	0.0037	0.0034	100.0	99.47	ug/L	-1	10	
Thallium	A	0.0083	0.0079	50.00	49.73	ug/L	-1	10	
Arsenic	E	0.0058	0.0052	100.0	99.31	ug/L	-1	10	
Chromium	E	0.0628	0.0430	100.0	102.4	ug/L	2	10	
Cobalt	E	0.0798	0.0777	100.0	106.3	ug/L	6	10	
Copper	E	0.1341	0.0837	100.0	86.15	ug/L	**-14**	10	c- ***
Manganese	E	0.0223	0.0187	100.0	106.7	ug/L	7	10	
Nickel	E	0.0242	0.0219	100.0	106.2	ug/L	6	10	
Sodium	E	0.0157	0.0074	10000	8416	ug/L	**-16**	10	c- ***
Vanadium	E	0.0407	0.0291	100.0	100.6	ug/L	1	10	
Zinc	E	0.0643	0.0120	100.0	93.91	ug/L	-6	10	
Iron	H	0.0096	0.0087	10000	10760	ug/L	8	10	
Selenium	H	0.0015	0.0014	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1446239	-57.73
Scandium	A	2109018	1229031	-41.72
Scandium	E	22341	15830	-29.14
Scandium	H	632070	409225	-35.26
Germanium	H	139223	105879	-23.95
Germanium	E	13309	11726	-11.89
Indium	A	3575408	3001814	-16.04
Bismuth	A	4485641	4233239	-5.63
Yttrium	A	3188793	2515076	-21.13
Terbium	A	6094388	5934042	-2.63

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287031 File : 09i22l00031 Time : 22-SEP-2009 16:32
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Molybdenum	A	ND	0.1000	0.05038	ug/L	
Potassium	A	[6.213]	10.00	5.476	ug/L	!ib
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Cobalt	E	ND	0.1000	0.06395	ug/L	
Copper	E	ND	0.1000	0.07274	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Vanadium	E	ND	0.1000	0.05956	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1542778	-54.91
Scandium	A	2109018	1276082	-39.49
Scandium	E	22341	16434	-26.44
Scandium	H	632070	425075	-32.75
Germanium	H	139223	112475	-19.21
Germanium	E	13309	12364	-7.10
Indium	A	3575408	3216376	-10.04
Bismuth	A	4485641	4664083	3.98
Yttrium	A	3188793	2608389	-18.20
Terbium	A	6094388	6116758	0.37

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287037 File : 09i22l00037 Time : 22-SEP-2009 17:34
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0136	0.0060	10000	8969	ug/L	-10	10	
Antimony	A	0.0032	0.0027	100.0	100.7	ug/L	1	10	
Barium	A	7.2E-4	5.4E-4	100.0	94.30	ug/L	-6	10	
Beryllium	A	0.0026	0.0027	100.0	108.0	ug/L	8	10	
Cadmium	A	8.6E-4	8.0E-4	100.0	98.75	ug/L	-1	10	
Calcium	A	3.0E-4	1.9E-4	10000	9664	ug/L	-3	10	
Lead	A	0.0085	0.0076	100.0	100.5	ug/L	1	10	
Magnesium	A	0.0065	0.0050	10000	8738	ug/L	**-13**	10	c- ***
Molybdenum	A	0.0023	0.0021	100.0	96.71	ug/L	-3	10	
Potassium	A	0.0208	0.0059	10000	9515	ug/L	-5	10	
Silver	A	0.0037	0.0034	100.0	100.0	ug/L	0	10	
Thallium	A	0.0083	0.0078	50.00	49.70	ug/L	-1	10	
Arsenic	E	0.0058	0.0053	100.0	99.97	ug/L	0	10	
Chromium	E	0.0628	0.0434	100.0	103.5	ug/L	4	10	
Cobalt	E	0.0798	0.0784	100.0	107.3	ug/L	7	10	
Copper	E	0.1341	0.0848	100.0	87.31	ug/L	**-13**	10	c- ***
Manganese	E	0.0223	0.0189	100.0	107.5	ug/L	8	10	
Nickel	E	0.0242	0.0220	100.0	106.4	ug/L	6	10	
Sodium	E	0.0157	0.0075	10000	8588	ug/L	**-14**	10	c- ***
Vanadium	E	0.0407	0.0296	100.0	102.3	ug/L	2	10	
Zinc	E	0.0643	0.0122	100.0	95.37	ug/L	-5	10	
Iron	H	0.0096	0.0085	10000	10480	ug/L	5	10	
Selenium	H	0.0015	0.0014	100.0	101.2	ug/L	1	10	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1476221	-56.85
Scandium	A	2109018	1215166	-42.38
Scandium	E	22341	15642	-29.99
Scandium	H	632070	416766	-34.06
Germanium	H	139223	106859	-23.25
Germanium	E	13309	11568	-13.08
Indium	A	3575408	2924361	-18.21
Bismuth	A	4485641	4076676	-9.12
Yttrium	A	3188793	2462418	-22.78
Terbium	A	6094388	5734481	-5.91

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287039 File : 09i22l00039 Time : 22-SEP-2009 17:55
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Molybdenum	A	ND	0.1000	0.05038	ug/L	
Potassium	A	[5.880]	10.00	5.476	ug/L	!ib
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Cobalt	E	ND	0.1000	0.06395	ug/L	
Copper	E	ND	0.1000	0.07274	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Vanadium	E	ND	0.1000	0.05956	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1648161	-51.83
Scandium	A	2109018	1322985	-37.27
Scandium	E	22341	17705	-20.75
Scandium	H	632070	444201	-29.72
Germanium	H	139223	116025	-16.66
Germanium	E	13309	13015	-2.21
Indium	A	3575408	3178811	-11.09
Bismuth	A	4485641	4533980	1.08
Yttrium	A	3188793	2618345	-17.89
Terbium	A	6094388	5969703	-2.05

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287050 File : 09i22l00050 Time : 22-SEP-2009 19:49
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0136	0.0061	10000	9117	ug/L	-9	10	
Antimony	A	0.0032	0.0027	100.0	101.1	ug/L	1	10	
Barium	A	7.2E-4	5.5E-4	100.0	96.06	ug/L	-4	10	
Beryllium	A	0.0026	0.0027	100.0	107.1	ug/L	7	10	
Cadmium	A	8.6E-4	8.0E-4	100.0	99.80	ug/L	0	10	
Calcium	A	3.0E-4	2.0E-4	10000	9784	ug/L	-2	10	
Lead	A	0.0085	0.0076	100.0	100.9	ug/L	1	10	
Magnesium	A	0.0065	0.0051	10000	8864	ug/L	**-11**	10	c- ***
Molybdenum	A	0.0023	0.0021	100.0	98.38	ug/L	-2	10	
Potassium	A	0.0208	0.0060	10000	9569	ug/L	-4	10	
Silver	A	0.0037	0.0034	100.0	101.1	ug/L	1	10	
Thallium	A	0.0083	0.0079	50.00	49.78	ug/L	0	10	
Arsenic	E	0.0058	0.0052	100.0	98.63	ug/L	-1	10	
Chromium	E	0.0628	0.0420	100.0	100.0	ug/L	0	10	
Cobalt	E	0.0798	0.0750	100.0	102.7	ug/L	3	10	
Copper	E	0.1341	0.0824	100.0	84.84	ug/L	**-15**	10	c- ***
Manganese	E	0.0223	0.0183	100.0	104.5	ug/L	5	10	
Nickel	E	0.0242	0.0212	100.0	102.8	ug/L	3	10	
Sodium	E	0.0157	0.0074	10000	8398	ug/L	**-16**	10	c- ***
Vanadium	E	0.0407	0.0289	100.0	99.66	ug/L	0	10	
Zinc	E	0.0643	0.0119	100.0	93.26	ug/L	-7	10	
Iron	H	0.0096	0.0085	10000	10480	ug/L	5	10	
Selenium	H	0.0015	0.0014	100.0	101.6	ug/L	2	10	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1575364	-53.95
Scandium	A	2109018	1254876	-40.50
Scandium	E	22341	17071	-23.59
Scandium	H	632070	429612	-32.03
Germanium	H	139223	109042	-21.68
Germanium	E	13309	12489	-6.16
Indium	A	3575408	2942588	-17.70
Bismuth	A	4485641	4046735	-9.78
Yttrium	A	3188793	2468048	-22.60
Terbium	A	6094388	5710896	-6.29

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287052 File : 09i22l00052 Time : 22-SEP-2009 20:10
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Molybdenum	A	ND	0.1000	0.05038	ug/L	
Potassium	A	ND	10.00	5.476	ug/L	
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Cobalt	E	ND	0.1000	0.06395	ug/L	
Copper	E	ND	0.1000	0.07274	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Vanadium	E	ND	0.1000	0.05956	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1698733	-50.35
Scandium	A	2109018	1341832	-36.38
Scandium	E	22341	17797	-20.34
Scandium	H	632070	452488	-28.41
Germanium	H	139223	116696	-16.18
Germanium	E	13309	13174	-1.01
Indium	A	3575408	3180172	-11.05
Bismuth	A	4485641	4511722	0.58
Yttrium	A	3188793	2640790	-17.19
Terbium	A	6094388	6041386	-0.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287067 File : 09i22l00067 Time : 22-SEP-2009 22:43
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2268	0.1000	ug/L	!a+
Barium	A	0.9592	0.1000	ug/L	!a+
Beryllium	A	[-0.01290]	0.1000	ug/L	i- ***
Cadmium	A	1.670	0.1000	ug/L	!a+
Lead	A	1.210	0.1000	ug/L	!a+
Silver	A	0.1177	0.1000	ug/L	!a+
Thallium	A	[0.04520]	0.05000	ug/L	!a+
Arsenic	E	0.2929	0.1000	ug/L	!a+
Chromium	E	1.158	0.1000	ug/L	!a+
Cobalt	E	3.788	0.1000	ug/L	!a+
Copper	E	3.879	0.1000	ug/L	!a+
Manganese	E	6.679	0.1000	ug/L	!a+
Nickel	E	3.893	0.1000	ug/L	!a+
Vanadium	E	[-0.1033]	0.1000	ug/L	!a-
Zinc	E	5.060	0.1000	ug/L	!a+
Selenium	H	0.1739	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	84020	ug/L	84
Calcium	A	300000	285800	ug/L	95
Magnesium	A	100000	80190	ug/L	80
Molybdenum	A	2000	2009	ug/L	100
Potassium	A	100000	92500	ug/L	93
Sodium	E	250000	185400	ug/L	74
Iron	H	250000	267100	ug/L	107

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	610990	**-82.14 ***
Scandium	A	2109018	584604	**-72.28 ***
Scandium	E	22341	9310	-58.33
Scandium	H	632070	245229	-61.20
Germanium	H	139223	67926	-51.21
Germanium	E	13309	7645	-42.56
Indium	A	3575408	1755008	-50.91
Bismuth	A	4485641	2507769	-44.09
Yttrium	A	3188793	1407715	-55.85
Terbium	A	6094388	3673533	-39.72

!=warning +=high bias -=low bias a=ICSA i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287068 File : 09i22l00068 Time : 22-SEP-2009 22:53
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	80910	ug/L	-19		
Cadmium	A	100.0	87.95	ug/L	-12	20	
Calcium	A	300000	280700	ug/L	-6		
Magnesium	A	100000	77080	ug/L	-23		
Molybdenum	A	2000	1921	ug/L	-4		
Potassium	A	100000	90560	ug/L	-9		
Silver	A	50.00	40.99	ug/L	-18	20	
Arsenic	E	100.0	87.46	ug/L	-13	20	
Chromium	E	200.0	207.8	ug/L	4	20	
Cobalt	E	200.0	210.5	ug/L	5	20	
Copper	E	200.0	138.1	ug/L	**-31**	20	ab- ***
Manganese	E	200.0	220.0	ug/L	10	20	
Nickel	E	200.0	199.8	ug/L	0	20	
Sodium	E	250000	179300	ug/L	-28		
Vanadium	E	200.0	207.4	ug/L	4	20	
Zinc	E	100.0	74.08	ug/L	**-26**	20	ab- ***
Iron	H	250000	263600	ug/L	5		
Selenium	H	100.0	89.06	ug/L	-11	20	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	632070	222626	-64.78
Scandium	A	2109018	633641	-69.96
Scandium	E	22341	8790	-60.66
Germanium	H	139223	64987	-53.32
Germanium	E	13309	7550	-43.27
Indium	A	3575408	1871466	-47.66
Yttrium	A	3188793	1531344	-51.98

-=low bias ab=ICSAB

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i22m00001	TUN				09/22/09 12:04	1.0	1	
002	09i22m00002	X	RINSE			09/22/09 12:10	1.0	2	
003	09i22m00003	ICALBLK	CALBLANK			09/22/09 12:21	1.0	2	
004	09i22m00004	ICAL				09/22/09 12:31	1.0	3 2	
005	09i22m00005	ICAL				09/22/09 12:41	1.0	4 2	
006	09i22m00006	ICAL				09/22/09 12:51	1.0	5 2	
007	09i22m00007	ICAL				09/22/09 13:01	1.0	6 2	
008	09i22m00008	ICAL				09/22/09 13:11	1.0	7 2	
009	09i22m00009	ICAL				09/22/09 13:21	1.0	8 2	
010	09i22m00010	ICV				09/22/09 13:31	1.0	9 2	
011	09i22m00011	ICB				09/22/09 13:41	1.0	2	
012	09i22m00012	X				09/22/09 13:51	1.0	2	
013	09i22m00013	ICSA				09/22/09 14:08	1.0	10 2	6:CA=320000
014	09i22m00014	ICSAB				09/22/09 14:18	1.0	11 2	10:CA=320000
015	09i22m00015	X	RINSE			09/22/09 14:29	1.0	2	
016	09i22m00016	X	RINSE			09/22/09 14:39	1.0	2	
017	09i22m00017	SAMPLE	214901-008	Water	154979	09/22/09 14:49	10.0	2	
018	09i22m00018	SAMPLE	214901-009	Water	154979	09/22/09 14:59	5.0	2	
019	09i22m00019	SAMPLE	214901-010	Water	154979	09/22/09 15:09	10.0	2	
020	09i22m00020	SAMPLE	214940-002	Water	155040	09/22/09 15:19	50.0	2	
021	09i22m00021	X				09/22/09 15:30	1.0	12 2	
022	09i22m00022	CCV				09/22/09 15:40	1.0	12 2	
023	09i22m00023	CCB				09/22/09 15:49	1.0	2	
024	09i22m00024	ICSA				09/22/09 16:00	1.0	10 2	7:CA=310000
025	09i22m00025	ICSAB				09/22/09 16:10	1.0	11 2	10:CA=320000
026	09i22m00026	X	RINSE			09/22/09 16:18	1.0	2	
027	09i22m00027	X	RINSE			09/22/09 16:28	1.0	2	
028	09i22m00028	X	RINSE			09/22/09 16:38	1.0	2	
029	09i22m00029	BLANK	QC513001	Water	155149	09/22/09 16:48	5.0	2	
030	09i22m00030	BS	QC513002	Water	155149	09/22/09 16:58	5.0	2	
031	09i22m00031	BSD	QC513003	Water	155149	09/22/09 17:08	5.0	2	
032	09i22m00032	MSS	214922-005	Water	155149	09/22/09 17:18	5.0	2	1:NA=50000
033	09i22m00033	SER	QC513006	Water	155149	09/22/09 17:29	25.0	2	
034	09i22m00034	MS	QC513004	Water	155149	09/22/09 17:39	5.0	2	1:NA=50000
035	09i22m00035	MSD	QC513005	Water	155149	09/22/09 17:49	5.0	2	1:NA=49000
036	09i22m00036	PDS	QC513007	Water	155149	09/22/09 17:59	5.0	13 14 2	
037	09i22m00037	CCV				09/22/09 18:09	1.0	12 2	
038	09i22m00038	CCB				09/22/09 18:19	1.0	2	
039	09i22m00039	CCB				09/22/09 18:29	1.0	2	
040	09i22m00040	SAMPLE	214922-006	Water	155149	09/22/09 18:39	5.0	2	1:NA=46000
041	09i22m00041	SAMPLE	215020-001	Filtrate	155149	09/22/09 18:49	5.0	2	3:CA=46000
042	09i22m00042	CCV				09/22/09 18:59	1.0	12 2	
043	09i22m00043	CCB				09/22/09 19:09	1.0	2	
044	09i22m00044	MSS	214922-005	Water	155149	09/22/09 19:19	50.0	2	
045	09i22m00045	SER	QC513006	Water	155149	09/22/09 19:30	250.0	2	
046	09i22m00046	PDS	QC513007	Water	155149	09/22/09 19:40	50.0	13 14 2	
047	09i22m00047	SAMPLE	214922-006	Water	155149	09/22/09 19:50	50.0	2	
048	09i22m00048	SAMPLE	214809-004	Water	155040	09/22/09 20:00	5.0	2	
049	09i22m00049	SAMPLE	214865-001	Water	155040	09/22/09 20:10	5.0	2	
050	09i22m00050	CCV				09/22/09 20:20	1.0	12 2	
051	09i22m00051	CCB				09/22/09 20:30	1.0	2	
052	09i22m00052	ICSA				09/22/09 20:40	1.0	10 2	7:CA=320000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i22m00053	ICSAB				09/22/09 20:51	1.0	11 2	9:CA=320000
054	09i22m00054	X	RINSE			09/22/09 21:01	1.0	2	
055	09i22m00055	X	RINSE			09/22/09 21:11	1.0	2	
056	09i22m00056	BLANK	QC512579	Filtrate	155041	09/22/09 21:22	5.0	2	
057	09i22m00057	BS	QC512580	Filtrate	155041	09/22/09 21:32	5.0	2	
058	09i22m00058	BSD	QC512581	Filtrate	155041	09/22/09 21:42	5.0	2	
059	09i22m00059	MSS	214920-002	Filtrate	155041	09/22/09 21:52	5.0	2	1:NA=99000
060	09i22m00060	SER	QC512584	Filtrate	155041	09/22/09 22:02	25.0	2	
061	09i22m00061	TUN				09/22/09 22:13	1.0	1	
062	09i22m00062	X	RINSE			09/22/09 22:20	1.0	2	
063	09i22m00063	MS	QC512582	Filtrate	155041	09/22/09 22:30	5.0	2	
064	09i22m00064	MSD	QC512583	Filtrate	155041	09/22/09 22:40	5.0	2	
065	09i22m00065	PDS	QC512585	Filtrate	155041	09/22/09 22:50	5.0	13 14 2	
066	09i22m00066	CCV				09/22/09 23:00	1.0	12 2	
067	09i22m00067	CCV				09/22/09 23:10	1.0	12 2	
068	09i22m00068	CCB				09/22/09 23:20	1.0	2	
069	09i22m00069	CCB				09/22/09 23:30	1.0	2	
070	09i22m00070	MSS	214955-003	Filtrate	155041	09/22/09 23:40	5.0	2	1:NA=100000
071	09i22m00071	MS	QC512586	Filtrate	155041	09/22/09 23:50	5.0	2	
072	09i22m00072	MSD	QC512587	Filtrate	155041	09/23/09 00:00	5.0	2	
073	09i22m00073	SAMPLE	214811-003	Filtrate	155041	09/23/09 00:10	50.0	2	
074	09i22m00074	SAMPLE	214811-004	Filtrate	155041	09/23/09 00:21	50.0	2	
075	09i22m00075	SAMPLE	214811-003	Filtrate	155041	09/23/09 00:31	5.0	2	3:NA=51000
076	09i22m00076	CCV				09/23/09 00:41	1.0	12 2	
077	09i22m00077	CCB				09/23/09 00:51	1.0	2	
078	09i22m00078	BLANK	QC512540	Soil	155034	09/23/09 01:01	25.0	2	
079	09i22m00079	BS	QC512541	Soil	155034	09/23/09 01:11	25.0	2	
080	09i22m00080	BSD	QC512542	Soil	155034	09/23/09 01:21	25.0	2	
081	09i22m00081	MSS	214910-004	Soil	155034	09/23/09 01:31	50.0	2	
082	09i22m00082	MS	QC512543	Soil	155034	09/23/09 01:41	50.0	2	
083	09i22m00083	MSD	QC512544	Soil	155034	09/23/09 01:51	50.0	2	
084	09i22m00084	SAMPLE	214910-005	Soil	155034	09/23/09 02:01	50.0	2	
085	09i22m00085	SAMPLE	214910-006	Soil	155034	09/23/09 02:12	50.0	2	
086	09i22m00086	SAMPLE	214912-001	Soil	155034	09/23/09 02:22	50.0	2	
087	09i22m00087	SAMPLE	214912-002	Soil	155034	09/23/09 02:32	50.0	2	
088	09i22m00088	CCV				09/23/09 02:42	1.0	12 2	
089	09i22m00089	CCB				09/23/09 02:52	1.0	2	
090	09i22m00090	CCB				09/23/09 03:02	1.0	2	
091	09i22m00091	SAMPLE	214912-003	Soil	155034	09/23/09 03:12	50.0	2	
092	09i22m00092	CCV				09/23/09 03:22	1.0	12 2	
093	09i22m00093	CCB				09/23/09 03:32	1.0	2	
094	09i22m00094	ICSA				09/23/09 03:42	1.0	10 2	7:CA=310000
095	09i22m00095	ICSAB				09/23/09 03:53	1.0	11 2	10:CA=320000
096	09i22m00096	X	RINSE			09/23/09 04:03	1.0	2	
097	09i22m00097	X	RINSE			09/23/09 04:13	1.0	2	
098	09i22m00098	SAMPLE	214922-003	Water	155040	09/23/09 04:23	50.0	2	
099	09i22m00099	SAMPLE	214922-004	Water	155040	09/23/09 04:34	50.0	2	
100	09i22m00100	SAMPLE	214924-002	Water	155040	09/23/09 04:44	50.0	2	
101	09i22m00101	SAMPLE	214924-003	Water	155040	09/23/09 04:54	50.0	2	
102	09i22m00102	SAMPLE	214924-004	Water	155040	09/23/09 05:04	50.0	2	
103	09i22m00103	SAMPLE	214924-005	Water	155040	09/23/09 05:14	50.0	2	
104	09i22m00104	SAMPLE	214924-006	Water	155040	09/23/09 05:24	50.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09i22m00105	SAMPLE	214924-007	Water	155040	09/23/09 05:34	50.0	2	
106	09i22m00106	CCV				09/23/09 05:45	1.0	12 2	
107	09i22m00107	CCB				09/23/09 05:55	1.0	2	
108	09i22m00108	CCB				09/23/09 06:05	1.0	2	
109	09i22m00109	SAMPLE	214924-009	Water	155040	09/23/09 06:15	50.0	2	
110	09i22m00110	CCV				09/23/09 06:25	1.0	12 2	
111	09i22m00111	CCB				09/23/09 06:35	1.0	2	
112	09i22m00112	SAMPLE	214922-003	Water	155040	09/23/09 06:45	5.0	2	1:NA=39000
113	09i22m00113	SAMPLE	214922-004	Water	155040	09/23/09 06:55	5.0	2	2:NA=52000
114	09i22m00114	SAMPLE	214924-002	Water	155040	09/23/09 07:05	5.0	2	1:NA=33000
115	09i22m00115	SAMPLE	214924-003	Water	155040	09/23/09 07:16	5.0	2	1:NA=47000
116	09i22m00116	SAMPLE	214924-004	Water	155040	09/23/09 07:26	5.0	2	1:NA=47000
117	09i22m00117	SAMPLE	214924-005	Water	155040	09/23/09 07:36	5.0	2	1:NA=53000
118	09i22m00118	SAMPLE	214924-006	Water	155040	09/23/09 07:46	5.0	2	1:NA=51000
119	09i22m00119	SAMPLE	214924-007	Water	155040	09/23/09 07:56	5.0	2	1:NA=50000
120	09i22m00120	SAMPLE	214924-009	Water	155040	09/23/09 08:06	5.0	2	1:NA=42000
121	09i22m00121	CCV				09/23/09 08:16	1.0	12 2	
122	09i22m00122	TUN				09/23/09 08:27	1.0	1	
123	09i22m00123	X	RINSE			09/23/09 08:34	1.0	2	
124	09i22m00124	CCB				09/23/09 08:46	1.0	2	
125	09i22m00125	ICSA				09/23/09 08:58	1.0	10 2	7:CA=310000
126	09i22m00126	ICSAB				09/23/09 09:09	1.0	11 2	11:CA=320000
127	09i22m00127	X	RINSE			09/23/09 09:19	1.0	2	
128	09i22m00128	X	RINSE			09/23/09 09:29	1.0	2	
129	09i22m00129	MSS	214920-002	Filtrate	155041	09/23/09 09:40	100.0	2	
130	09i22m00130	SER	QC512584	Filtrate	155041	09/23/09 09:50	500.0	2	
131	09i22m00131	PDS	QC512585	Filtrate	155041	09/23/09 10:00	100.0	13 14 2	
132	09i22m00132	MSS	214955-003	Filtrate	155041	09/23/09 10:11	100.0	2	
133	09i22m00133	BLANK	QC513164	Filtrate	155189	09/23/09 10:21	5.0	2	
134	09i22m00134	BS	QC513165	Filtrate	155189	09/23/09 10:31	5.0	2	
135	09i22m00135	BSD	QC513166	Filtrate	155189	09/23/09 10:41	5.0	2	
136	09i22m00136	MSS	215044-005	Filtrate	155189	09/23/09 10:51	5.0	2	
137	09i22m00137	CCV				09/23/09 11:01	1.0	12 2	
138	09i22m00138	CCB				09/23/09 11:11	1.0	2	
139	09i22m00139	X				09/23/09 11:21	1.0	2	
140	09i22m00140	SER	QC513171	Filtrate	155189	09/23/09 11:32	25.0	2	
141	09i22m00141	MS	QC513167	Filtrate	155189	09/23/09 11:42	5.0	2	
142	09i22m00142	MSD	QC513168	Filtrate	155189	09/23/09 11:52	5.0	2	
143	09i22m00143	PDS	QC513172	Filtrate	155189	09/23/09 12:02	5.0	13 14 2	
144	09i22m00144	MSS	215044-007	Filtrate	155189	09/23/09 12:12	5.0	2	
145	09i22m00145	MS	QC513169	Filtrate	155189	09/23/09 12:22	5.0	2	
146	09i22m00146	MSD	QC513170	Filtrate	155189	09/23/09 12:32	5.0	2	
147	09i22m00147	SAMPLE	215044-004	Filtrate	155189	09/23/09 12:42	5.0	2	
148	09i22m00148	SAMPLE	215044-006	Filtrate	155189	09/23/09 12:53	5.0	2	
149	09i22m00149	SAMPLE	215044-008	Filtrate	155189	09/23/09 13:03	5.0	2	2:CA=27000
150	09i22m00150	CCV				09/23/09 13:13	1.0	12 2	
151	09i22m00151	CCB				09/23/09 13:23	1.0	2	
152	09i22m00152	SAMPLE	215044-009	Filtrate	155189	09/23/09 13:33	5.0	2	
153	09i22m00153	SAMPLE	215044-011	Filtrate	155189	09/23/09 13:43	5.0	2	
154	09i22m00154	SAMPLE	215044-012	Filtrate	155189	09/23/09 13:53	5.0	2	
155	09i22m00155	CCV				09/23/09 14:04	1.0	12 2	
156	09i22m00156	CCB				09/23/09 14:14	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	09i22m00157	ICSA				09/23/09 14:24	1.0	10 2	7:CA=310000
158	09i22m00158	ICSAB				09/23/09 14:34	1.0	11 2	11:CA=320000
159	09i22m00159	X	RINSE			09/23/09 14:45	1.0	2	
160	09i22m00160	X	RINSE			09/23/09 14:55	1.0	2	
161	09i22m00161	SAMPLE	215058-001	Filtrate	155189	09/23/09 15:05	5.0	2	
162	09i22m00162	SAMPLE	215058-002	Filtrate	155189	09/23/09 15:15	5.0	2	
163	09i22m00163	SAMPLE	215058-003	Filtrate	155189	09/23/09 15:26	5.0	2	2:BA=900
164	09i22m00164	SAMPLE	215058-004	Filtrate	155189	09/23/09 15:36	5.0	2	
165	09i22m00165	SAMPLE	215058-005	Filtrate	155189	09/23/09 15:46	5.0	2	3:NA=24000
166	09i22m00166	SAMPLE	215058-006	Filtrate	155189	09/23/09 15:56	5.0	2	
167	09i22m00167	SAMPLE	215058-007	Filtrate	155189	09/23/09 16:06	5.0	2	
168	09i22m00168	SAMPLE	215058-008	Filtrate	155189	09/23/09 16:16	5.0	2	1:MN=230
169	09i22m00169	CCV				09/23/09 16:26	1.0	12 2	
170	09i22m00170	CCB				09/23/09 16:36	1.0	2	
171	09i22m00171	SAMPLE	215058-009	Filtrate	155189	09/23/09 16:47	5.0	2	1:MN=240
172	09i22m00172	SAMPLE	215058-003	Filtrate	155189	09/23/09 16:57	50.0	2	
173	09i22m00173	SAMPLE	215058-009	Filtrate	155189	09/23/09 17:07	5.0	2	1:MN=240
174	09i22m00174	CCV				09/23/09 17:17	1.0	12 2	
175	09i22m00175	CCB				09/23/09 17:27	1.0	2	
176	09i22m00176	BLANK	QC513173	Water	155190	09/23/09 17:37	5.0	2	
177	09i22m00177	BS	QC513174	Water	155190	09/23/09 17:47	5.0	2	
178	09i22m00178	BSD	QC513175	Water	155190	09/23/09 17:57	5.0	2	
179	09i22m00179	MSS	215051-001	Water	155190	09/23/09 18:07	5.0	2	
180	09i22m00180	MS	QC513176	Water	155190	09/23/09 18:17	5.0	2	1:NA=24000
181	09i22m00181	MSD	QC513177	Water	155190	09/23/09 18:27	5.0	2	1:NA=24000
182	09i22m00182	TUN				09/23/09 18:38	1.0	1	
183	09i22m00183	X	RINSE			09/23/09 18:45	1.0	2	
184	09i22m00184	SAMPLE	215051-002	Water	155190	09/23/09 18:55	5.0	2	
185	09i22m00185	SAMPLE	215051-003	Water	155190	09/23/09 19:05	5.0	2	
186	09i22m00186	SAMPLE	215051-004	Water	155190	09/23/09 19:15	5.0	2	1:NA=27000
187	09i22m00187	SAMPLE	215051-005	Water	155190	09/23/09 19:26	5.0	2	
188	09i22m00188	CCV				09/23/09 19:36	1.0	12 2	
189	09i22m00189	CCB				09/23/09 19:46	1.0	2	
190	09i22m00190	SAMPLE	215051-006	Water	155190	09/23/09 19:56	5.0	2	
191	09i22m00191	SAMPLE	215051-007	Water	155190	09/23/09 20:06	5.0	2	
192	09i22m00192	SAMPLE	215051-008	Water	155190	09/23/09 20:16	5.0	2	
193	09i22m00193	SAMPLE	215051-009	Water	155190	09/23/09 20:26	5.0	2	1:NA=26000
194	09i22m00194	SAMPLE	215051-010	Water	155190	09/23/09 20:36	5.0	2	1:NA=29000
195	09i22m00195	SAMPLE	215051-011	Water	155190	09/23/09 20:46	5.0	2	1:NA=38000
196	09i22m00196	CCV				09/23/09 20:56	1.0	12 2	
197	09i22m00197	CCB				09/23/09 21:06	1.0	2	
198	09i22m00198	BLANK	QC513001	Water	155149	09/23/09 21:17	5.0	2	
199	09i22m00199	BS	QC513002	Water	155149	09/23/09 21:27	5.0	2	
200	09i22m00200	BSD	QC513003	Water	155149	09/23/09 21:37	5.0	2	
201	09i22m00201	BLANK	QC513008	Filtrate	155150	09/23/09 21:47	5.0	2	
202	09i22m00202	SAMPLE	215019-001	Filtrate	155150	09/23/09 21:57	1.0	2	
203	09i22m00203	BS	QC513009	Filtrate	155150	09/23/09 22:07	5.0	2	
204	09i22m00204	BSD	QC513010	Filtrate	155150	09/23/09 22:17	5.0	2	
205	09i22m00205	CCV				09/23/09 22:27	1.0	12 2	
206	09i22m00206	CCB				09/23/09 22:37	1.0	2	
207	09i22m00207	SAMPLE	215019-008	Filtrate	155150	09/23/09 22:47	20.0	2	1:NA=78000
208	09i22m00208	MS	QC513011	Filtrate	155150	09/23/09 22:58	20.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	09i22m00209	MSD	QC513012	Filtrate	155150	09/23/09 23:08	20.0	2	
210	09i22m00210	MSS	215019-005	Filtrate	155150	09/23/09 23:18	20.0	2	2:NA=140000
211	09i22m00211	SAMPLE	215019-006	Filtrate	155150	09/23/09 23:28	20.0	2	3:NA=440000
212	09i22m00212	SAMPLE	215019-007	Filtrate	155150	09/23/09 23:38	20.0	2	2:NA=410000
213	09i22m00213	CCV				09/23/09 23:49	1.0	12 2	
214	09i22m00214	X				09/23/09 23:58	1.0	12 2	
215	09i22m00215	CCB				09/24/09 00:08	1.0	2	
216	09i22m00216	ICSA				09/24/09 00:19	1.0	10 2	7:CA=310000
217	09i22m00217	ICSAB				09/24/09 00:29	1.0	11 2	10:CA=310000
218	09i22m00218	X	RINSE			09/24/09 00:39	1.0	2	
219	09i22m00219	X	RINSE			09/24/09 00:49	1.0	2	
220	09i22m00220	X	RINSE			09/24/09 01:00	1.0	2	
221	09i22m00221	X	RINSE			09/24/09 01:10	1.0	2	
222	09i22m00222	X	RINSE			09/24/09 01:20	1.0	2	

JYF 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 217.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1426200	4202107	35507	1106706	302030	28812	5178122	3644746	5969850	6509046
		LOWER LIMIT	427860	1260632	10652	332012	90609	8644	1553437	1093424	1790955	1952714
		UPPER LIMIT	1711440	5042528	42608	1328047	362436	34574	6213746	4373695	7163820	7810855
013	ICSA		1122115	4064155	38906	1095854	287631	31324	4573040	3008849	5788486	6047460
014	ICSAB		1185840	4075200	38606	1097087	287702	30793	4588646	2950313	5824168	6043107
017	SAMPLE	214901-008	1195205	4098211	37323	1087964	311981	31501	5160023	3794540	5956948	6574601
018	SAMPLE	214901-009	1124630	3964084	34872	1095176	312127	30268	5102115	3898495	5814418	6631027
019	SAMPLE	214901-010	1205564	3937581	35448	1046153	295793	29815	5049555	3801984	5758229	6580969
020	SAMPLE	214940-002	1292437	4006577	36144	1035178	290310	29974	5123661	3809238	5833072	6588164
022	CCV		1355195	4095701	37535	1092117	296054	30138	5055669	3679709	5873817	6566653
023	CCB		1388838	4134613	38559	1095114	298804	30568	5240336	3776534	5981504	6601696
024	ICSA		1169581	4110036	39149	1084873	284545	31083	4621067	3027792	5870795	6151323
025	ICSAB		1226515	4120176	39039	1099485	290535	31064	4646323	2988284	5890165	6173745
029	BLANK	QC513001	1146027	4016305	36765	1047950	307286	31648	5238769	4032072	5941125	6717424
030	BS	QC513002	1125933	3944472	35470	954399	281893	30613	5130001	3942564	5814943	6706436
031	BSD	QC513003	1111440	3996193	36204	1065864	304664	30908	5133925	3912970	5902588	6750275
032	MSS	214922-005	1008566	3592475	35621	1038049	309509	31516	4613138	3491813	5268774	6020203
033	SER	QC513006	1255837	4067566	37129	1080016	302932	30836	5213416	3910052	5971803	6710936
034	MS	QC513004	1109220	3913704	35030	1031872	301587	30448	4974930	3736373	5742061	6652241
035	MSD	QC513005	1115148	3954797	35114	1031335	300740	30510	5006844	3750796	5780900	6624476
036	PDS	QC513007	1111102	3977248	35729	1042213	303302	30640	4995586	3692640	5824526	6661695
037	CCV		1353838	4213937	38737	1096868	299011	30692	5195451	3690539	6091371	6705797
038	CCB		1384932	4251893	39872	1114143	307515	31648	5361999	3772791	6165105	6727674
039	CCB		1376928	4259612	39003	1110870	305548	31387	5389096	3868625	6184175	6827992
040	SAMPLE	214922-006	1105012	4044069	36658	1079523	312671	31749	5114831	3793007	5889880	6666649
041	SAMPLE	215020-001	1177852	4076050	37929	1079147	312139	31924	5041727	3653482	5911247	6620870
042	CCV		1300082	4226400	39670	1121213	302413	31677	5190531	3713010	6106738	6726236
043	CCB		1341682	4290409	39997	1127366	308484	32051	5362694	3797795	6140533	6731199
044	MSS	214922-005	1241138	4124483	38190	1098169	305020	31457	5331921	3948880	6056250	6763146
045	SER	QC513006	1259794	4182088	38242	1092843	304094	31267	5333018	3894041	6070340	6809450
046	PDS	QC513007	1201857	4165889	37512	1092811	298343	30761	5176113	3804410	6068747	6778839
047	SAMPLE	214922-006	1219580	4166640	37792	1114689	309826	31101	5358009	3936059	6076688	6849900
048	SAMPLE	214809-004	1293549	4190238	38104	1091608	302116	31035	5239648	3852891	6017405	6749477
049	SAMPLE	214865-001	1306271	4165200	37815	1106294	301250	30751	5308001	3912130	6052464	6736396
050	CCV		1260816	4216829	38613	1113585	302779	31028	5226616	3742517	6086628	6739690
051	CCB		1293732	4192605	38292	1103494	303412	30946	5335610	3820173	6120985	6747377
052	ICSA		1089794	4117425	41428	1102374	286143	32510	4638351	3019927	5886554	6113153
053	ICSAB		1135718	4151901	39279	1114014	289768	31378	4644501	2985611	5942840	6147883
056	BLANK	QC512579	1373295	4280168	39793	1112128	307813	32044	5388616	3816148	6183932	6734099
057	BS	QC512580	1378107	4281688	39451	1106231	303195	31472	5405221	3891882	6229038	6883011
058	BSD	QC512581	1350267	4200771	39236	1114818	303526	31499	5295876	3837470	6104644	6739231
059	MSS	214920-002	1347982	4209515	39798	1095400	295210	31742	5193013	3673257	6008760	6584682
060	SER	QC512584	1458654	4525569	38221	1095725	302371	31414	5698806	4120850	6587131	7276183
063	MS	QC512582	1307860	4117594	37682	1064758	289971	30479	5130225	3654070	5962798	6585303
064	MSD	QC512583	1335324	4167553	37995	1073671	292443	30973	5137747	3660839	6020054	6661633
065	PDS	QC512585	1347967	4256435	38438	1088181	294337	30766	5203909	3668211	6088386	6723988
066	CCV		1383569	4314711	38765	1154398	310883	30935	5358905	3845555	6272096	6899291
067	CCV		1366923	4203769	38633	1101849	298363	31270	5209749	3749899	6097061	6776134
068	CCB		1402978	4260559	39056	1091528	299844	31569	5391198	3848253	6191648	6795961
069	CCB		1359080	4146058	39156	1073510	298565	31360	5288546	3816938	6058176	6635174
070	MSS	214955-003	1351923	4122001	37904	1074941	291057	30499	5080789	3576411	5927226	6521004

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
071	MS	QC512586	1378308	4143279	37921	1057212	288225	30609	5018946	3535093	5927232	6505603
072	MSD	QC512587	1360538	4116438	37709	1070277	286942	30129	5003711	3518555	5922074	6456056
073	SAMPLE	214811-003	1328507	4072608	37030	1067036	293091	30472	5189982	3796660	5931910	6591962
074	SAMPLE	214811-004	1301603	4058201	36580	1047070	287102	29963	5098099	3776981	5867873	6571092
075	SAMPLE	214811-003	1325808	4054960	36801	1045998	282260	29714	5008199	3575097	5877891	6471756
076	CCV		1315628	4109853	37077	1064699	286706	29928	5074567	3697852	5948986	6596930
077	CCB		1342345	4094934	37800	1059032	290191	30301	5189901	3697669	5931948	6535657
078	BLANK	QC512540	1219957	4024198	36562	1045030	288413	29778	5140356	3814590	5860161	6552712
079	BS	QC512541	1225660	4011289	36027	1041890	285134	29641	5104486	3814302	5841704	6567131
080	BSD	QC512542	1214188	3983405	35807	1032347	281611	29395	5094284	3795482	5832789	6542846
081	MSS	214910-004	1212552	4115728	36956	1062940	286861	29796	5130431	3836918	6010118	6597024
082	MS	QC512543	1213131	4101826	37061	1065541	285159	29788	5111603	3795327	6015997	6574943
083	MSD	QC512544	1205184	4127796	36980	1030921	279182	29572	5053624	3766791	6023469	6513143
084	SAMPLE	214910-005	1186854	4150580	37395	1067559	284741	29715	5119779	3775982	6017003	6488747
085	SAMPLE	214910-006	1202099	4099877	36721	1064283	285286	29861	5059920	3783388	5934256	6473432
086	SAMPLE	214912-001	1169646	4041984	36878	1071320	287041	29816	5071437	3761807	5964424	6470209
087	SAMPLE	214912-002	1178538	4082518	36705	1069779	285988	29698	5041790	3741743	5969713	6461114
088	CCV		1198559	3914889	36660	1048028	283158	29389	4867924	3474030	5662834	6187790
089	CCB		1257518	4080447	37213	1062887	288889	30047	5084661	3643223	5894729	6408696
090	CCB		1232877	4072298	37230	1068205	289978	29784	5109480	3673692	5871986	6421368
091	SAMPLE	214912-003	1195598	4113746	37327	1074256	287199	30197	5071713	3770033	5915062	6507981
092	CCV		1185994	4039108	36569	1049914	285400	29461	4980191	3553501	5826791	6399871
093	CCB		1255888	4109998	37366	1068145	288474	29984	5159534	3666407	5890176	6447571
094	ICSA		1020535	3917547	36365	1026848	267542	29312	4438875	2933773	5624548	5889249
095	ICSAB		1072168	3910070	35891	1025112	268853	29275	4424949	2885924	5597321	5869426
098	SAMPLE	214922-003	1209030	3973265	36461	1044964	291520	30406	5093870	3764604	5782563	6478408
099	SAMPLE	214922-004	1206925	3992208	35846	1029485	289241	29583	5090128	3786688	5835470	6530789
100	SAMPLE	214924-002	1225846	3984565	35551	1023383	286555	29756	5099365	3795196	5780504	6537645
101	SAMPLE	214924-003	1215006	3916714	35710	1014630	284270	29343	5033969	3790364	5760162	6450408
102	SAMPLE	214924-004	1225922	3948358	35307	1021783	284167	29134	5115197	3813479	5791624	6529758
103	SAMPLE	214924-005	1229510	3952432	35049	1013048	283348	29229	5115096	3860485	5785663	6558146
104	SAMPLE	214924-006	1227358	3990623	35236	1013952	283711	29352	5133979	3856260	5800721	6595484
105	SAMPLE	214924-007	1226472	3993111	35062	1013731	283200	29391	5123736	3860810	5815799	6616805
106	CCV		1238039	3978675	35058	1033160	278428	28627	4952339	3629195	5788804	6471111
107	CCB		1291059	3931390	35596	1013889	281845	29145	5030172	3671893	5764425	6370259
108	CCB		1271822	3963257	35559	1031535	281482	28969	5072901	3738169	5784335	6466264
109	SAMPLE	214924-009	1169224	3928161	34484	1001236	279700	28594	4996541	3782522	5694176	6418121
110	CCV		1229576	3945454	34444	1009302	274927	28414	4931445	3645550	5740356	6414958
111	CCB		1280800	3968879	35069	1113851	299431	28695	5068785	3718169	5780762	6462348
112	SAMPLE	214922-003	1224490	3943944	34820	1005405	274981	28840	4946616	3680130	5747666	6399536
113	SAMPLE	214922-004	1237166	3920572	34516	994060	273401	28260	4865939	3572952	5610306	6272882
114	SAMPLE	214924-002	1247322	3887360	34637	996032	275524	28633	4973459	3635503	5653401	6341947
115	SAMPLE	214924-003	1251540	3906172	34474	996917	274660	28484	4947584	3644372	5679925	6395746
116	SAMPLE	214924-004	1251417	3913043	34446	1092394	292082	28452	4904363	3634481	5658411	6300996
117	SAMPLE	214924-005	1248157	3938360	32639	1000156	273886	26859	4933175	3679955	5697367	6362477
118	SAMPLE	214924-006	1241012	3897465	34791	999775	276291	28722	4909307	3674110	5710894	6322737
119	SAMPLE	214924-007	1246902	3929238	34420	985114	275402	28455	4954837	3641888	5678232	6366732
120	SAMPLE	214924-009	1247275	3927223	34472	994649	272178	28351	4977294	3615370	5673886	6431632
121	CCV		1194850	3925713	34006	1001998	272587	28053	4921501	3632458	5739930	6442890
124	CCB		1253777	3970312	36450	1018226	280576	29422	5051246	3723588	5794642	6428234
125	ICSA		1025341	3891478	35408	1002899	264253	28774	4446705	2971566	5568037	5939299
126	ICSAB		1067860	3839258	34874	989505	262831	28331	4384688	2913747	5504487	5867836

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
129	MSS	214920-002	1235706	3883050	33847	990130	277528	28598	5039557	3814100	5689937	6425871
130	SER	QC512584	1242403	3852048	33505	973493	274803	28156	4973223	3792296	5662789	6405393
131	PDS	QC512585	1210774	3822085	32478	963216	266258	27251	4887605	3704844	5616487	6424498
132	MSS	214955-003	1224383	3795169	32983	960782	271103	28076	4953463	3803462	5598243	6373994
133	BLANK	QC513164	1300979	3835619	33211	968774	269990	27735	5004196	3772580	5655102	6425367
134	BS	QC513165	1246712	3847603	32776	963390	266915	27445	4971951	3831922	5662108	6540026
135	BSD	QC513166	1231867	3818059	32941	980225	269519	27326	4942497	3820609	5626704	6486090
136	MSS	215044-005	1256013	3803085	32661	963320	269811	27506	5015902	3852179	5604973	6541347
137	CCV		1245554	3841745	32741	980292	268268	27315	4907911	3740265	5653311	6479552
138	CCB		1293579	3871636	33837	871677	243686	27599	4992455	3784585	5684601	6476168
140	SER	QC513171	1256932	3758726	32588	963278	270997	27334	4994402	3850571	5549344	6480961
141	MS	QC513167	1222315	3758698	32399	959484	269691	27131	4874744	3801767	5522851	6405595
142	MSD	QC513168	1236131	3801437	32292	964029	268575	27290	4946927	3814553	5617795	6466206
143	PDS	QC513172	1213205	3829389	32599	977349	266936	27143	4890755	3749263	5617708	6472398
144	MSS	215044-007	1199670	3759230	32750	972780	271112	27688	4970603	3892976	5607946	6489953
145	MS	QC513169	1193119	3798830	32573	960879	268595	27569	4927537	3824253	5624719	6460396
146	MSD	QC513170	1188281	3783983	32613	969638	269119	27281	4963793	3817862	5624517	6509186
147	SAMPLE	215044-004	1200013	3758248	32137	960316	268889	27153	4946592	3849657	5569422	6478311
148	SAMPLE	215044-006	1213889	3758703	32618	964233	271210	27524	4953621	3901973	5541466	6423858
149	SAMPLE	215044-008	1120882	3797355	32193	962430	266636	27031	4884511	3786195	5522403	6406408
150	CCV		1168331	3799471	32710	967839	266605	27175	4870720	3741669	5548119	6437043
151	CCB		1225723	3826207	33361	984719	273171	27830	4967340	3808512	5613723	6403782
152	SAMPLE	215044-009	1213254	3743883	32704	975576	272036	27605	4927300	3804861	5549837	6458150
153	SAMPLE	215044-011	1216648	3737986	32682	962084	270156	27507	4942906	3854211	5538906	6443911
154	SAMPLE	215044-012	1210198	3776409	30678	955217	268006	25661	4909556	3836339	5557993	6404346
155	CCV		1164413	3770635	32632	968256	266263	26886	4842610	3756526	5584637	6430048
156	CCB		1233338	3812539	32913	971777	273226	27515	5003992	3845693	5606571	6475404
161	SAMPLE	215058-001	1307207	3831968	34223	990688	276063	28597	5007399	3893147	5696928	6487360
162	SAMPLE	215058-002	1299613	3793860	33837	975272	278096	28443	4977914	3869169	5649294	6410376
163	SAMPLE	215058-003	1296398	3860048	33950	982972	274525	28191	4955951	3794830	5627750	6493971
164	SAMPLE	215058-004	1287000	3773520	33639	977996	274342	27836	4999160	3806495	5604761	6566116
165	SAMPLE	215058-005	1334410	3796329	33133	973534	269610	27584	4868344	3677358	5489444	6359915
166	SAMPLE	215058-006	1352657	3820890	33830	972154	276916	28309	5007449	3839955	5593012	6479347
167	SAMPLE	215058-007	1307598	3773144	33618	967356	273692	28232	4986425	3882765	5602722	6564196
168	SAMPLE	215058-008	1297435	3790558	33316	988567	273860	27968	5000944	3910361	5616346	6495056
169	CCV		1260284	3769094	32793	938989	265559	27422	4870059	3783520	5600145	6426232
170	CCB		1303850	3823878	33774	992162	275574	28042	5022909	3848947	5637947	6530086
171	SAMPLE	215058-009	1238070	3767561	33334	971326	274010	28039	5025324	3953398	5656252	6491894
172	SAMPLE	215058-003	1258031	3745487	33259	969251	272638	27868	5000836	3938267	5594183	6526876
173	SAMPLE	215058-009	1249181	3735042	33061	965287	271308	27891	4983115	3940309	5594831	6563152
176	BLANK	QC513173	1231479	3773553	33480	968131	273311	28026	5026165	3950792	5610951	6520137
177	BS	QC513174	1215927	3725126	33163	967749	269977	27494	4936614	3889418	5566965	6459804
178	BSD	QC513175	1225157	3736064	33107	958832	268659	27623	4983188	3911487	5576965	6575672
180	MS	QC513176	1226611	3752846	33111	967662	270692	27911	4907642	3850092	5593400	6524106
181	MSD	QC513177	1217687	3740747	33004	962443	268884	27615	4914919	3823595	5528643	6471218
198	BLANK	QC513001	962453	3646235	31309	928907	273393	27449	4976962	4057582	5514968	6540073
199	BS	QC513002	927550	3646935	30831	924626	269833	27372	4881449	3969730	5491089	6579748
200	BSD	QC513003	908117	3600684	30638	922657	269130	27179	4895626	3963275	5471342	6576855
201	BLANK	QC513008	1146704	3746216	32768	962508	271344	27557	5038051	3915305	5625675	6578038
202	SAMPLE	215019-001	1193569	3820206	33231	971857	273205	27932	5040387	3982010	5687363	6593733
203	BS	QC513009	1147105	3774095	32915	969261	270381	27573	5008609	3883212	5632696	6527093
204	BSD	QC513010	1145367	3790376	33288	975991	272344	27789	5034365	3955046	5674526	6655807

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

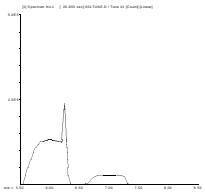
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
205	CCV		1152183	3810284	33188	980814	271400	27396	4938717	3810263	5619541	6524432
206	CCB		1177955	3807623	33526	976608	273285	28184	5051431	3906999	5696146	6601805
207	SAMPLE	215019-008	1232176	3788144	33264	965633	265962	27230	4826739	3643235	5515747	6352681
208	MS	QC513011	1259041	3813558	33659	961632	264319	27486	4851389	3612064	5576878	6395999
209	MSD	QC513012	1273023	3821663	33690	979157	265349	27320	4818851	3572648	5544609	6366427
210	MSS	215019-005	1320124	3856610	34248	971549	264455	27483	4762401	3479197	5514894	6268006
211	SAMPLE	215019-006	1339544	3870255	35803	972994	257591	27744	4560153	3071810	5430250	5908971
212	SAMPLE	215019-007	1383076	3971933	37256	1019627	268438	28881	4629562	3065477	5531203	5940272
213	CCV		1328805	3972110	36280	1042760	286071	29694	5094606	3746215	5839465	6606295
215	CCB		1317019	3999446	35537	1019407	283581	29557	5147355	3882085	5860243	6646245

MET26 QC Tune Report

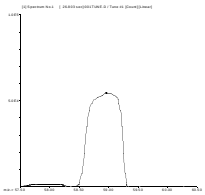
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\001TUNE.D
Date Acquired: Sep 22 2009 12:04 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

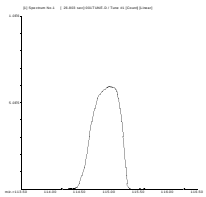
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	159346	156825	155086	154431	1.35	5.00	
59 Co	325938	325066	323745	322697	0.35	5.00	
115 In	3268321	3244642	3271935	3254096	1.34	5.00	
205 Tl	218210	216110	216373	215981	0.59	5.00	



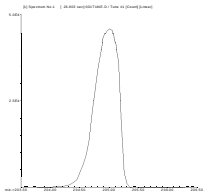
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



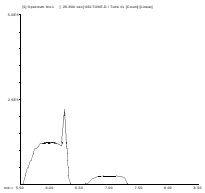
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

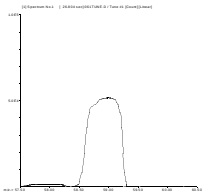
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\061TUNE.D
Date Acquired: Sep 22 2009 10:13 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

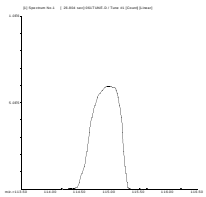
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	144306	144284	143296	144149	0.63	5.00	
59 Co	309492	307353	307050	308050	0.32	5.00	
115 In	3250252	3277926	3314715	3286640	1.51	5.00	
205 Tl	210707	211711	211260	212230	0.86	5.00	



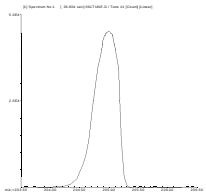
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



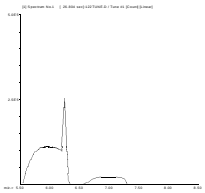
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

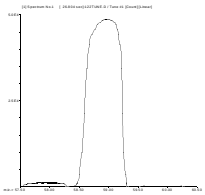
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\122TUNE.D
Date Acquired: Sep 23 2009 08:27 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

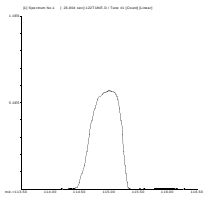
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	132530	131259	131924	130905	0.36	5.00	
59 Co	295144	294645	293760	294761	0.47	5.00	
115 In	3154991	3152347	3179680	3177290	1.17	5.00	
205 Tl	206365	206802	207870	208093	0.42	5.00	



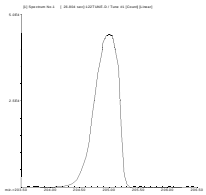
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



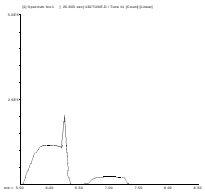
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

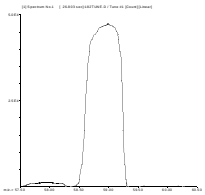
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\182TUNE.D
Date Acquired: Sep 23 2009 06:38 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

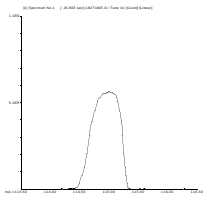
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	135179	134492	133152	133031	0.77	5.00	
59 Co	282119	282123	281930	281964	0.38	5.00	
115 In	3121561	3101005	3119894	3107148	0.56	5.00	
205 Tl	217171	218899	217184	218764	0.58	5.00	



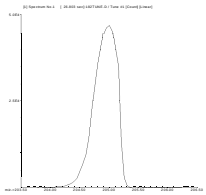
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 METALS Water: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019382324001 Date : 22-SEP-2009 12:21
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i22m00004	1019382324004		22-SEP-2009 12:31	S12854, S12847
L2	09i22m00005	1019382324005		22-SEP-2009 12:41	S12855, S12847
L3	09i22m00006	1019382324006		22-SEP-2009 12:51	S12856, S12847
L4	09i22m00007	1019382324007		22-SEP-2009 13:01	S12857, S12847
L5	09i22m00008	1019382324008		22-SEP-2009 13:11	S12852, S12847
L6	09i22m00009	1019382324009		22-SEP-2009 13:21	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0060	0.0046	0.0045	0.0043	0.0043	0.0043	BLNK	-2.5841	234.224		0.0047	1.000	0.995	
Antimony	A	0.0071	0.0028	0.0028	0.0027	0.0029	0.0028	BLNK	-0.0060	352.601		0.0035	1.000	0.995	
Barium	A	0.0014	8.7E-4	8.1E-4	7.8E-4	7.7E-4	8.1E-4	BLNK	-0.0106	1243.39		9.0E-4	1.000	0.995	
Beryllium	A	0.0036	0.0028	0.0029	0.0028	0.0028	0.0029	BLNK	-0.0128	348.699		0.0030	1.000	0.995	
Cadmium	A	8.6E-4	7.6E-4	7.1E-4	6.9E-4	6.9E-4	6.9E-4	BLNK	-0.0122	1455.12		7.3E-4	1.000	0.995	
Calcium	A	9.8E-4	3.4E-4	2.6E-4	2.0E-4	1.9E-4	1.8E-4	BLNK	-33.937	5466.88		3.6E-4	1.000	0.995	
Lead	A	0.0189	0.0079	0.0065	0.0054	0.0054	0.0053	BLNK	-0.2388	189.259		0.0082	1.000	0.995	
Magnesium	A	0.0047	0.0036	0.0035	0.0033	0.0033	0.0033	BLNK	-1.7149	306.140		0.0036	1.000	0.995	
Molybdenum	A	0.0026	0.0019	0.0019	0.0018	0.0020	0.0019	BLNK	-0.0199	516.448		0.0020	1.000	0.995	
Potassium	A	0.0817	0.0208	0.0133	0.0065	0.0060	0.0058	BLNK	-129.53	172.711		0.0224	1.000	0.995	
Silver	A	0.0048	0.0036	0.0034	0.0033	0.0035	0.0034	BLNK	-0.0126	294.870		0.0037	1.000	0.995	
Thallium	A	0.0099	0.0071	0.0070	0.0066	0.0074	0.0073	BLNK	-0.0162	135.798		0.0076	1.000	0.995	
Arsenic	E	0.0080	0.0068	0.0062	0.0060	0.0059	0.0058	BLNK	-0.0210	170.652		0.0065	1.000	0.995	
Chromium	E	0.1911	0.0725	0.0601	0.0479	0.0466	0.0462	BLNK	-0.2394	21.6511		0.0774	1.000	0.995	
Cobalt	E	0.1087	0.0951	0.0906	0.0914	0.0888	0.0874	BLNK	-0.0102	11.4082		0.0937	1.000	0.995	
Copper	E	0.2782	0.1286	0.1133	0.0964	0.0925	0.0895	BLNK	-0.1513	11.1039		0.1331	1.000	0.995	
Manganese	E	0.0277	0.0179	0.0168	0.0159	0.0156	0.0154	BLNK	-0.0163	64.6942		0.0182	1.000	0.995	
Nickel	E	0.0504	0.0316	0.0282	0.0273	0.0260	0.0254	BLNK	-0.0413	39.1422		0.0315	1.000	0.995	
Sodium	E	0.0319	0.0100	0.0068	0.0046	0.0042	0.0041	BLNK	-69.469	243.211		0.0103	1.000	0.995	
Vanadium	E	0.0555	0.0370	0.0357	0.0352	0.0345	0.0345	BLNK	-0.0260	28.9544		0.0387	1.000	0.995	
Zinc	E	0.1268	0.0346	0.0223	0.0111	0.0097	0.0093	BLNK	-0.2663	106.662		0.0356	0.999	0.995	
Iron	H	0.0127	0.0088	0.0088	0.0082	0.0080	0.0080	BLNK	-1.3932	125.121		0.0091	1.000	0.995	
Selenium	H	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	BLNK	-0.0131	939.657		0.0011	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	14	50.00	4	100.0	2	1000	0	10000	1	20000	0
Antimony	A	0.100	144	0.500	-3	1.000	-2	10.00	-6	100.0	2	200.0	0
Barium	A	0.100	60	0.500	6	1.000	-1	10.00	-3	100.0	-4	200.0	1
Beryllium	A	0.100	12	0.500	-6	1.000	-1	10.00	-2	100.0	-3	200.0	1
Cadmium	A	0.100	14	0.500	8	1.000	1	10.00	0	100.0	1	200.0	0
Calcium	A	10.00	94	50.00	17	100.0	7	1000	5	10000	2	20000	0
Lead	A	0.100	19	0.500	1	1.000	-1	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	27	50.00	6	100.0	5	1000	1	10000	1	20000	0
Molybdenum	A	0.100	14	0.500	-5	1.000	-6	10.00	-6	100.0	1	200.0	0
Potassium	A	10.00	16	50.00	0	100.0	1	1000	0	10000	2	20000	0
Silver	A	0.100	28	0.500	3	1.000	0	10.00	-3	100.0	2	200.0	0
Thallium	A	0.050	2	0.250	-10	0.500	-9	5.000	-10	50.00	1	100.0	0
Arsenic	E	0.100	15	0.500	12	1.000	3	10.00	3	100.0	1	200.0	0
Chromium	E	0.100	74	0.500	9	1.000	6	10.00	1	100.0	1	200.0	0
Cobalt	E	0.100	14	0.500	7	1.000	2	10.00	4	100.0	1	200.0	0
Copper	E	0.100	58	0.500	13	1.000	11	10.00	6	100.0	3	200.0	-1
Manganese	E	0.100	63	0.500	13	1.000	7	10.00	3	100.0	1	200.0	0
Nickel	E	0.100	56	0.500	15	1.000	6	10.00	6	100.0	2	200.0	0
Sodium	E	10.00	-18	50.00	4	100.0	-3	1000	4	10000	2	20000	0
Vanadium	E	0.100	35	0.500	2	1.000	1	10.00	2	100.0	0	200.0	0
Zinc	E	0.100	986	0.500	216	1.000	111	10.00	16	100.0	3	200.0	-1
Iron	H	10.00	45	50.00	8	100.0	8	1000	2	10000	0	20000	0
Selenium	H	0.100	13	0.500	4	1.000	4	10.00	3	100.0	2	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 METALS Water
EPA 6020

Inst : MET26
Calnum : 1019382324001 Cal Date : 22-SEP-2009

ICV 1019382324010 (09i22m00010 22-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10320	ug/L	3	10	
Antimony	A	100.0	102.8	ug/L	3	10	
Barium	A	100.0	96.05	ug/L	-4	10	
Beryllium	A	100.0	97.33	ug/L	-3	10	
Cadmium	A	100.0	99.41	ug/L	-1	10	
Calcium	A	10000	10030	ug/L	0	10	
Lead	A	100.0	101.0	ug/L	1	10	
Magnesium	A	10000	10150	ug/L	2	10	
Molybdenum	A	100.0	100.6	ug/L	1	10	
Potassium	A	10000	10200	ug/L	2	10	
Silver	A	100.0	106.6	ug/L	7	10	
Thallium	A	50.00	50.94	ug/L	2	10	
Arsenic	E	100.0	103.0	ug/L	3	10	
Chromium	E	100.0	99.32	ug/L	-1	10	
Cobalt	E	100.0	99.56	ug/L	0	10	
Copper	E	100.0	100.4	ug/L	0	10	
Manganese	E	100.0	97.47	ug/L	-3	10	
Nickel	E	100.0	99.58	ug/L	0	10	
Sodium	E	10000	10080	ug/L	1	10	
Vanadium	E	100.0	98.73	ug/L	-1	10	
Zinc	E	100.0	100.3	ug/L	0	10	
Iron	H	10000	9941	ug/L	-1	10	
Selenium	H	100.0	100.4	ug/L	0	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324011 File : 09i22m00011 Time : 22-SEP-2009 13:41
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.04970]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02060]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.105]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1381036	-3.17
Scandium	A	4202107	4281565	1.89
Scandium	E	35507	40282	13.45
Scandium	H	1106706	1121584	1.34
Germanium	H	302030	306381	1.44
Germanium	E	28812	31949	10.89
Indium	A	5178122	5306147	2.47
Bismuth	A	3644746	3716443	1.97
Yttrium	A	5969850	6125637	2.61
Terbium	A	6509046	6634244	1.92

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324022 File : 09i22m00022 Time : 22-SEP-2009 15:40
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0043	10000	10110	ug/L	1	10	
Antimony	A	0.0035	0.0029	100.0	101.4	ug/L	1	10	
Barium	A	9.0E-4	7.6E-4	100.0	94.62	ug/L	-5	10	
Beryllium	A	0.0030	0.0027	100.0	92.94	ug/L	-7	10	
Cadmium	A	7.3E-4	6.7E-4	100.0	97.63	ug/L	-2	10	
Calcium	A	3.6E-4	1.8E-4	10000	9859	ug/L	-1	10	
Lead	A	0.0082	0.0054	100.0	102.6	ug/L	3	10	
Magnesium	A	0.0036	0.0033	10000	10010	ug/L	0	10	
Molybdenum	A	0.0020	0.0019	100.0	100.1	ug/L	0	10	
Potassium	A	0.0224	0.0059	10000	10090	ug/L	1	10	
Silver	A	0.0037	0.0035	100.0	104.6	ug/L	5	10	
Thallium	A	0.0076	0.0074	50.00	50.28	ug/L	1	10	
Arsenic	E	0.0065	0.0059	100.0	100.5	ug/L	1	10	
Chromium	E	0.0774	0.0454	100.0	98.02	ug/L	-2	10	
Cobalt	E	0.0937	0.0859	100.0	97.98	ug/L	-2	10	
Copper	E	0.1331	0.0884	100.0	98.03	ug/L	-2	10	
Manganese	E	0.0182	0.0150	100.0	96.83	ug/L	-3	10	
Nickel	E	0.0315	0.0251	100.0	98.29	ug/L	-2	10	
Sodium	E	0.0103	0.0042	10000	10030	ug/L	0	10	
Vanadium	E	0.0387	0.0338	100.0	97.78	ug/L	-2	10	
Zinc	E	0.0356	0.0093	100.0	98.69	ug/L	-1	10	
Iron	H	0.0091	0.0079	10000	9861	ug/L	-1	10	
Selenium	H	0.0011	0.0010	100.0	97.49	ug/L	-3	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1355195	-4.98
Scandium	A	4202107	4095701	-2.53
Scandium	E	35507	37535	5.71
Scandium	H	1106706	1092117	-1.32
Germanium	H	302030	296054	-1.98
Germanium	E	28812	30138	4.60
Indium	A	5178122	5055669	-2.36
Bismuth	A	3644746	3679709	0.96
Yttrium	A	5969850	5873817	-1.61
Terbium	A	6509046	6566653	0.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324023 File : 09i22m00023 Time : 22-SEP-2009 15:49
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.05170]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.01850]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1388838	-2.62
Scandium	A	4202107	4134613	-1.61
Scandium	E	35507	38559	8.60
Scandium	H	1106706	1095114	-1.05
Germanium	H	302030	298804	-1.07
Germanium	E	28812	30568	6.09
Indium	A	5178122	5240336	1.20
Bismuth	A	3644746	3776534	3.62
Yttrium	A	5969850	5981504	0.20
Terbium	A	6509046	6601696	1.42

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324024 File : 09i22m00024 Time : 22-SEP-2009 16:00
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2846	0.1000	ug/L	!a+
Barium	A	1.397	0.1000	ug/L	!a+
Beryllium	A	[0.02900]	0.1000	ug/L	
Cadmium	A	2.968	0.1000	ug/L	!a+
Lead	A	1.246	0.1000	ug/L	!a+
Silver	A	0.1652	0.1000	ug/L	!a+
Thallium	A	0.08690	0.05000	ug/L	!a+
Arsenic	E	0.3609	0.1000	ug/L	!a+
Chromium	E	1.053	0.1000	ug/L	!a+
Cobalt	E	3.597	0.1000	ug/L	!a+
Copper	E	5.573	0.1000	ug/L	!a+
Manganese	E	6.412	0.1000	ug/L	!a+
Nickel	E	3.622	0.1000	ug/L	!a+
Vanadium	E	[0.07810]	0.1000	ug/L	!a+
Zinc	E	6.418	0.1000	ug/L	!a+
Selenium	H	0.2429	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	105400	ug/L	105
Calcium	A	300000	314900	ug/L	105
Magnesium	A	100000	102000	ug/L	102
Molybdenum	A	2000	2015	ug/L	101
Potassium	A	100000	105700	ug/L	106
Sodium	E	250000	249700	ug/L	100
Iron	H	250000	251500	ug/L	101

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1169581	-17.99
Scandium	A	4202107	4110036	-2.19
Scandium	E	35507	39149	10.26
Scandium	H	1106706	1084873	-1.97
Germanium	H	302030	284545	-5.79
Germanium	E	28812	31083	7.88
Indium	A	5178122	4621067	-10.76
Bismuth	A	3644746	3027792	-16.93
Yttrium	A	5969850	5870795	-1.66
Terbium	A	6509046	6151323	-5.50

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324025 File : 09i22m00025 Time : 22-SEP-2009 16:10
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	108400	ug/L	8		
Cadmium	A	100.0	106.7	ug/L	7	20	
Calcium	A	300000	320500	ug/L	7		
Magnesium	A	100000	104700	ug/L	5		
Molybdenum	A	2000	2043	ug/L	2		
Potassium	A	100000	107900	ug/L	8		
Silver	A	50.00	53.83	ug/L	8	20	
Arsenic	E	100.0	110.6	ug/L	11	20	
Chromium	E	200.0	208.3	ug/L	4	20	
Cobalt	E	200.0	199.3	ug/L	0	20	
Copper	E	200.0	191.6	ug/L	-4	20	
Manganese	E	200.0	214.0	ug/L	7	20	
Nickel	E	200.0	192.8	ug/L	-4	20	
Sodium	E	250000	257800	ug/L	3		
Vanadium	E	200.0	211.5	ug/L	6	20	
Zinc	E	100.0	97.75	ug/L	-2	20	
Iron	H	250000	258500	ug/L	3		
Selenium	H	100.0	107.1	ug/L	7	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	1099485	-0.65
Scandium	A	4202107	4120176	-1.95
Scandium	E	35507	39039	9.95
Germanium	H	302030	290535	-3.81
Germanium	E	28812	31064	7.82
Indium	A	5178122	4646323	-10.27
Yttrium	A	5969850	5890165	-1.33

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324037 File : 09i22m00037 Time : 22-SEP-2009 18:09
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0043	10000	10060	ug/L	1	10	
Antimony	A	0.0035	0.0028	100.0	99.88	ug/L	0	10	
Barium	A	9.0E-4	7.6E-4	100.0	94.27	ug/L	-6	10	
Beryllium	A	0.0030	0.0026	100.0	91.59	ug/L	-8	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	96.35	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9853	ug/L	-1	10	
Lead	A	0.0082	0.0054	100.0	101.7	ug/L	2	10	
Magnesium	A	0.0036	0.0032	10000	9843	ug/L	-2	10	
Molybdenum	A	0.0020	0.0019	100.0	99.34	ug/L	-1	10	
Potassium	A	0.0224	0.0059	10000	10050	ug/L	1	10	
Silver	A	0.0037	0.0035	100.0	104.4	ug/L	4	10	
Thallium	A	0.0076	0.0075	50.00	50.75	ug/L	2	10	
Arsenic	E	0.0065	0.0059	100.0	100.8	ug/L	1	10	
Chromium	E	0.0774	0.0449	100.0	97.05	ug/L	-3	10	
Cobalt	E	0.0937	0.0853	100.0	97.25	ug/L	-3	10	
Copper	E	0.1331	0.0885	100.0	98.16	ug/L	-2	10	
Manganese	E	0.0182	0.0151	100.0	97.80	ug/L	-2	10	
Nickel	E	0.0315	0.0248	100.0	96.95	ug/L	-3	10	
Sodium	E	0.0103	0.0041	10000	9838	ug/L	-2	10	
Vanadium	E	0.0387	0.0335	100.0	96.97	ug/L	-3	10	
Zinc	E	0.0356	0.0092	100.0	98.07	ug/L	-2	10	
Iron	H	0.0091	0.0081	10000	10080	ug/L	1	10	
Selenium	H	0.0011	0.0011	100.0	99.18	ug/L	-1	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1353838	-5.07
Scandium	A	4202107	4213937	0.28
Scandium	E	35507	38737	9.10
Scandium	H	1106706	1096868	-0.89
Germanium	H	302030	299011	-1.00
Germanium	E	28812	30692	6.53
Indium	A	5178122	5195451	0.33
Bismuth	A	3644746	3690539	1.26
Yttrium	A	5969850	6091371	2.04
Terbium	A	6509046	6705797	3.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324038 File : 09i22m00038 Time : 22-SEP-2009 18:19
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.04580]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02310]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.459]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1384932	-2.89
Scandium	A	4202107	4251893	1.18
Scandium	E	35507	39872	12.29
Scandium	H	1106706	1114143	0.67
Germanium	H	302030	307515	1.82
Germanium	E	28812	31648	9.84
Indium	A	5178122	5361999	3.55
Bismuth	A	3644746	3772791	3.51
Yttrium	A	5969850	6165105	3.27
Terbium	A	6509046	6727674	3.36

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324039 File : 09i22m00039 Time : 22-SEP-2009 18:29
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.01430]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.356]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1376928	-3.45
Scandium	A	4202107	4259612	1.37
Scandium	E	35507	39003	9.85
Scandium	H	1106706	1110870	0.38
Germanium	H	302030	305548	1.16
Germanium	E	28812	31387	8.94
Indium	A	5178122	5389096	4.07
Bismuth	A	3644746	3868625	6.14
Yttrium	A	5969850	6184175	3.59
Terbium	A	6509046	6827992	4.90

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324042 File : 09i22m00042 Time : 22-SEP-2009 18:59
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0043	10000	9969	ug/L	0	10	
Antimony	A	0.0035	0.0028	100.0	99.96	ug/L	0	10	
Barium	A	9.0E-4	7.7E-4	100.0	95.12	ug/L	-5	10	
Beryllium	A	0.0030	0.0027	100.0	93.55	ug/L	-6	10	
Cadmium	A	7.3E-4	6.7E-4	100.0	97.01	ug/L	-3	10	
Calcium	A	3.6E-4	1.8E-4	10000	9871	ug/L	-1	10	
Lead	A	0.0082	0.0054	100.0	102.1	ug/L	2	10	
Magnesium	A	0.0036	0.0032	10000	9765	ug/L	-2	10	
Molybdenum	A	0.0020	0.0019	100.0	99.20	ug/L	-1	10	
Potassium	A	0.0224	0.0059	10000	10110	ug/L	1	10	
Silver	A	0.0037	0.0035	100.0	104.5	ug/L	5	10	
Thallium	A	0.0076	0.0075	50.00	50.92	ug/L	2	10	
Arsenic	E	0.0065	0.0058	100.0	98.39	ug/L	-2	10	
Chromium	E	0.0774	0.0440	100.0	94.95	ug/L	-5	10	
Cobalt	E	0.0937	0.0834	100.0	95.14	ug/L	-5	10	
Copper	E	0.1331	0.0858	100.0	95.17	ug/L	-5	10	
Manganese	E	0.0182	0.0147	100.0	95.17	ug/L	-5	10	
Nickel	E	0.0315	0.0242	100.0	94.80	ug/L	-5	10	
Sodium	E	0.0103	0.0040	10000	9554	ug/L	-4	10	
Vanadium	E	0.0387	0.0327	100.0	94.70	ug/L	-5	10	
Zinc	E	0.0356	0.0090	100.0	95.54	ug/L	-4	10	
Iron	H	0.0091	0.0079	10000	9879	ug/L	-1	10	
Selenium	H	0.0011	0.0010	100.0	98.22	ug/L	-2	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1300082	-8.84
Scandium	A	4202107	4226400	0.58
Scandium	E	35507	39670	11.72
Scandium	H	1106706	1121213	1.31
Germanium	H	302030	302413	0.13
Germanium	E	28812	31677	9.94
Indium	A	5178122	5190531	0.24
Bismuth	A	3644746	3713010	1.87
Yttrium	A	5969850	6106738	2.29
Terbium	A	6509046	6726236	3.34

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324043 File : 09i22m00043 Time : 22-SEP-2009 19:09
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.04330]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.01440]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1341682	-5.93
Scandium	A	4202107	4290409	2.10
Scandium	E	35507	39997	12.65
Scandium	H	1106706	1127366	1.87
Germanium	H	302030	308484	2.14
Germanium	E	28812	32051	11.24
Indium	A	5178122	5362694	3.56
Bismuth	A	3644746	3797795	4.20
Yttrium	A	5969850	6140533	2.86
Terbium	A	6509046	6731199	3.41

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324050 File : 09i22m00050 Time : 22-SEP-2009 20:20
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9941	ug/L	-1	10	
Antimony	A	0.0035	0.0028	100.0	99.97	ug/L	0	10	
Barium	A	9.0E-4	7.6E-4	100.0	94.21	ug/L	-6	10	
Beryllium	A	0.0030	0.0027	100.0	95.55	ug/L	-4	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	96.40	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9840	ug/L	-2	10	
Lead	A	0.0082	0.0054	100.0	101.7	ug/L	2	10	
Magnesium	A	0.0036	0.0032	10000	9736	ug/L	-3	10	
Molybdenum	A	0.0020	0.0019	100.0	98.47	ug/L	-2	10	
Potassium	A	0.0224	0.0059	10000	10070	ug/L	1	10	
Silver	A	0.0037	0.0035	100.0	103.8	ug/L	4	10	
Thallium	A	0.0076	0.0074	50.00	50.17	ug/L	0	10	
Arsenic	E	0.0065	0.0059	100.0	100.1	ug/L	0	10	
Chromium	E	0.0774	0.0451	100.0	97.47	ug/L	-3	10	
Cobalt	E	0.0937	0.0857	100.0	97.74	ug/L	-2	10	
Copper	E	0.1331	0.0883	100.0	97.84	ug/L	-2	10	
Manganese	E	0.0182	0.0149	100.0	96.49	ug/L	-4	10	
Nickel	E	0.0315	0.0248	100.0	97.02	ug/L	-3	10	
Sodium	E	0.0103	0.0041	10000	9794	ug/L	-2	10	
Vanadium	E	0.0387	0.0336	100.0	97.12	ug/L	-3	10	
Zinc	E	0.0356	0.0092	100.0	97.66	ug/L	-2	10	
Iron	H	0.0091	0.0079	10000	9865	ug/L	-1	10	
Selenium	H	0.0011	0.0010	100.0	98.34	ug/L	-2	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1260816	-11.60
Scandium	A	4202107	4216829	0.35
Scandium	E	35507	38613	8.75
Scandium	H	1106706	1113585	0.62
Germanium	H	302030	302779	0.25
Germanium	E	28812	31028	7.69
Indium	A	5178122	5226616	0.94
Bismuth	A	3644746	3742517	2.68
Yttrium	A	5969850	6086628	1.96
Terbium	A	6509046	6739690	3.54

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324051 File : 09i22m00051 Time : 22-SEP-2009 20:30
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.04430]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.01780]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1293732	-9.29
Scandium	A	4202107	4192605	-0.23
Scandium	E	35507	38292	7.84
Scandium	H	1106706	1103494	-0.29
Germanium	H	302030	303412	0.46
Germanium	E	28812	30946	7.41
Indium	A	5178122	5335610	3.04
Bismuth	A	3644746	3820173	4.81
Yttrium	A	5969850	6120985	2.53
Terbium	A	6509046	6747377	3.66

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324052 File : 09i22m00052 Time : 22-SEP-2009 20:40
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2887	0.1000	ug/L	!a+
Barium	A	1.439	0.1000	ug/L	!a+
Beryllium	A	[0.02960]	0.1000	ug/L	
Cadmium	A	2.925	0.1000	ug/L	!a+
Lead	A	1.264	0.1000	ug/L	!a+
Silver	A	0.1750	0.1000	ug/L	!a+
Thallium	A	0.08340	0.05000	ug/L	!a+
Arsenic	E	0.3054	0.1000	ug/L	!a+
Chromium	E	1.061	0.1000	ug/L	!a+
Cobalt	E	3.477	0.1000	ug/L	!a+
Copper	E	5.315	0.1000	ug/L	!a+
Manganese	E	6.133	0.1000	ug/L	!a+
Nickel	E	3.428	0.1000	ug/L	!a+
Vanadium	E	[0.07240]	0.1000	ug/L	!a+
Zinc	E	6.191	0.1000	ug/L	!a+
Selenium	H	0.2401	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	105000	ug/L	105
Calcium	A	300000	317000	ug/L	106
Magnesium	A	100000	100900	ug/L	101
Molybdenum	A	2000	2010	ug/L	101
Potassium	A	100000	106100	ug/L	106
Sodium	E	250000	238300	ug/L	95
Iron	H	250000	249400	ug/L	100

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1089794	-23.59
Scandium	A	4202107	4117425	-2.02
Scandium	E	35507	41428	16.68
Scandium	H	1106706	1102374	-0.39
Germanium	H	302030	286143	-5.26
Germanium	E	28812	32510	12.83
Indium	A	5178122	4638351	-10.42
Bismuth	A	3644746	3019927	-17.14
Yttrium	A	5969850	5886554	-1.40
Terbium	A	6509046	6113153	-6.08

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324053 File : 09i22m00053 Time : 22-SEP-2009 20:51
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105700	ug/L	6		
Cadmium	A	100.0	106.6	ug/L	7	20	
Calcium	A	300000	319200	ug/L	6		
Magnesium	A	100000	101700	ug/L	2		
Molybdenum	A	2000	2009	ug/L	0		
Potassium	A	100000	0	ug/L	-100		sat ***
Silver	A	50.00	53.58	ug/L	7	20	
Arsenic	E	100.0	109.0	ug/L	9	20	
Chromium	E	200.0	206.8	ug/L	3	20	
Cobalt	E	200.0	197.8	ug/L	-1	20	
Copper	E	200.0	189.5	ug/L	-5	20	
Manganese	E	200.0	211.8	ug/L	6	20	
Nickel	E	200.0	191.6	ug/L	-4	20	
Sodium	E	250000	254200	ug/L	2		
Vanadium	E	200.0	210.2	ug/L	5	20	
Zinc	E	100.0	97.05	ug/L	-3	20	
Iron	H	250000	254600	ug/L	2		
Selenium	H	100.0	106.7	ug/L	7	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	1114014	0.66
Scandium	A	4202107	4151901	-1.19
Scandium	E	35507	39279	10.62
Germanium	H	302030	289768	-4.06
Germanium	E	28812	31378	8.91
Indium	A	5178122	4644501	-10.31
Yttrium	A	5969850	5942840	-0.45

sat=saturated

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324092 File : 09i22m00092 Time : 23-SEP-2009 03:22
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9880	ug/L	-1	10	
Antimony	A	0.0035	0.0028	100.0	99.46	ug/L	-1	10	
Barium	A	9.0E-4	7.6E-4	100.0	93.89	ug/L	-6	10	
Beryllium	A	0.0030	0.0028	100.0	96.88	ug/L	-3	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	95.46	ug/L	-5	10	
Calcium	A	3.6E-4	1.8E-4	10000	9783	ug/L	-2	10	
Lead	A	0.0082	0.0052	100.0	98.24	ug/L	-2	10	
Magnesium	A	0.0036	0.0031	10000	9600	ug/L	-4	10	
Molybdenum	A	0.0020	0.0019	100.0	98.18	ug/L	-2	10	
Potassium	A	0.0224	0.0059	10000	10030	ug/L	0	10	
Silver	A	0.0037	0.0035	100.0	103.2	ug/L	3	10	
Thallium	A	0.0076	0.0073	50.00	49.28	ug/L	-1	10	
Arsenic	E	0.0065	0.0059	100.0	100.0	ug/L	0	10	
Chromium	E	0.0774	0.0452	100.0	97.53	ug/L	-2	10	
Cobalt	E	0.0937	0.0860	100.0	98.07	ug/L	-2	10	
Copper	E	0.1331	0.0883	100.0	97.84	ug/L	-2	10	
Manganese	E	0.0182	0.0149	100.0	96.11	ug/L	-4	10	
Nickel	E	0.0315	0.0251	100.0	98.25	ug/L	-2	10	
Sodium	E	0.0103	0.0041	10000	9892	ug/L	-1	10	
Vanadium	E	0.0387	0.0335	100.0	96.99	ug/L	-3	10	
Zinc	E	0.0356	0.0091	100.0	97.22	ug/L	-3	10	
Iron	H	0.0091	0.0079	10000	9831	ug/L	-2	10	
Selenium	H	0.0011	0.0010	100.0	98.31	ug/L	-2	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1185994	-16.84
Scandium	A	4202107	4039108	-3.88
Scandium	E	35507	36569	2.99
Scandium	H	1106706	1049914	-5.13
Germanium	H	302030	285400	-5.51
Germanium	E	28812	29461	2.25
Indium	A	5178122	4980191	-3.82
Bismuth	A	3644746	3553501	-2.50
Yttrium	A	5969850	5826791	-2.40
Terbium	A	6509046	6399871	-1.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324093 File : 09i22m00093 Time : 23-SEP-2009 03:32
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.05170]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02990]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.883]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1255888	-11.94
Scandium	A	4202107	4109998	-2.19
Scandium	E	35507	37366	5.24
Scandium	H	1106706	1068145	-3.48
Germanium	H	302030	288474	-4.49
Germanium	E	28812	29984	4.07
Indium	A	5178122	5159534	-0.36
Bismuth	A	3644746	3666407	0.59
Yttrium	A	5969850	5890176	-1.33
Terbium	A	6509046	6447571	-0.94

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324094 File : 09i22m00094 Time : 23-SEP-2009 03:42
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2840	0.1000	ug/L	!a+
Barium	A	1.392	0.1000	ug/L	!a+
Beryllium	A	[0.03200]	0.1000	ug/L	
Cadmium	A	2.822	0.1000	ug/L	!a+
Lead	A	1.238	0.1000	ug/L	!a+
Silver	A	0.1712	0.1000	ug/L	!a+
Thallium	A	0.08410	0.05000	ug/L	!a+
Arsenic	E	0.3593	0.1000	ug/L	!a+
Chromium	E	1.060	0.1000	ug/L	!a+
Cobalt	E	3.658	0.1000	ug/L	!a+
Copper	E	5.399	0.1000	ug/L	!a+
Manganese	E	6.305	0.1000	ug/L	!a+
Nickel	E	3.627	0.1000	ug/L	!a+
Vanadium	E	[0.06980]	0.1000	ug/L	!a+
Zinc	E	6.345	0.1000	ug/L	!a+
Selenium	H	0.2311	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	103400	ug/L	103
Calcium	A	300000	314300	ug/L	105
Magnesium	A	100000	98100	ug/L	98
Molybdenum	A	2000	1981	ug/L	99
Potassium	A	100000	105000	ug/L	105
Sodium	E	250000	248200	ug/L	99
Iron	H	250000	248900	ug/L	100

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1020535	-28.44
Scandium	A	4202107	3917547	-6.77
Scandium	E	35507	36365	2.42
Scandium	H	1106706	1026848	-7.22
Germanium	H	302030	267542	-11.42
Germanium	E	28812	29312	1.74
Indium	A	5178122	4438875	-14.28
Bismuth	A	3644746	2933773	-19.51
Yttrium	A	5969850	5624548	-5.78
Terbium	A	6509046	5889249	-9.52

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324095 File : 09i22m00095 Time : 23-SEP-2009 03:53
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104600	ug/L	5		
Cadmium	A	100.0	106.3	ug/L	6	20	
Calcium	A	300000	319000	ug/L	6		
Magnesium	A	100000	100800	ug/L	1		
Molybdenum	A	2000	2016	ug/L	1		
Potassium	A	100000	0	ug/L	-100		sat ***
Silver	A	50.00	53.25	ug/L	7	20	
Arsenic	E	100.0	108.9	ug/L	9	20	
Chromium	E	200.0	209.8	ug/L	5	20	
Cobalt	E	200.0	202.2	ug/L	1	20	
Copper	E	200.0	190.0	ug/L	-5	20	
Manganese	E	200.0	212.9	ug/L	6	20	
Nickel	E	200.0	195.0	ug/L	-2	20	
Sodium	E	250000	255600	ug/L	2		
Vanadium	E	200.0	212.4	ug/L	6	20	
Zinc	E	100.0	96.52	ug/L	-3	20	
Iron	H	250000	253200	ug/L	1		
Selenium	H	100.0	107.6	ug/L	8	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	1025112	-7.37
Scandium	A	4202107	3910070	-6.95
Scandium	E	35507	35891	1.08
Germanium	H	302030	268853	-10.98
Germanium	E	28812	29275	1.61
Indium	A	5178122	4424949	-14.55
Yttrium	A	5969850	5597321	-6.24

sat=saturated

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324106 File : 09i22m00106 Time : 23-SEP-2009 05:45
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9796	ug/L	-2	10	
Antimony	A	0.0035	0.0028	100.0	99.36	ug/L	-1	10	
Barium	A	9.0E-4	7.5E-4	100.0	93.67	ug/L	-6	10	
Beryllium	A	0.0030	0.0027	100.0	93.10	ug/L	-7	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	96.32	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9731	ug/L	-3	10	
Lead	A	0.0082	0.0053	100.0	99.99	ug/L	0	10	
Magnesium	A	0.0036	0.0031	10000	9606	ug/L	-4	10	
Molybdenum	A	0.0020	0.0019	100.0	96.93	ug/L	-3	10	
Potassium	A	0.0224	0.0058	10000	9918	ug/L	-1	10	
Silver	A	0.0037	0.0035	100.0	103.1	ug/L	3	10	
Thallium	A	0.0076	0.0073	50.00	49.22	ug/L	-2	10	
Arsenic	E	0.0065	0.0058	100.0	99.08	ug/L	-1	10	
Chromium	E	0.0774	0.0453	100.0	97.74	ug/L	-2	10	
Cobalt	E	0.0937	0.0860	100.0	98.11	ug/L	-2	10	
Copper	E	0.1331	0.0873	100.0	96.81	ug/L	-3	10	
Manganese	E	0.0182	0.0149	100.0	96.06	ug/L	-4	10	
Nickel	E	0.0315	0.0251	100.0	98.34	ug/L	-2	10	
Sodium	E	0.0103	0.0040	10000	9771	ug/L	-2	10	
Vanadium	E	0.0387	0.0334	100.0	96.72	ug/L	-3	10	
Zinc	E	0.0356	0.0091	100.0	97.18	ug/L	-3	10	
Iron	H	0.0091	0.0078	10000	9753	ug/L	-2	10	
Selenium	H	0.0011	0.0010	100.0	98.58	ug/L	-1	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1238039	-13.19
Scandium	A	4202107	3978675	-5.32
Scandium	E	35507	35058	-1.26
Scandium	H	1106706	1033160	-6.65
Germanium	H	302030	278428	-7.81
Germanium	E	28812	28627	-0.64
Indium	A	5178122	4952339	-4.36
Bismuth	A	3644746	3629195	-0.43
Yttrium	A	5969850	5788804	-3.03
Terbium	A	6509046	6471111	-0.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324107 File : 09i22m00107 Time : 23-SEP-2009 05:55
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.06780]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03130]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[4.076]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1291059	-9.48
Scandium	A	4202107	3931390	-6.44
Scandium	E	35507	35596	0.25
Scandium	H	1106706	1013889	-8.39
Germanium	H	302030	281845	-6.68
Germanium	E	28812	29145	1.16
Indium	A	5178122	5030172	-2.86
Bismuth	A	3644746	3671893	0.74
Yttrium	A	5969850	5764425	-3.44
Terbium	A	6509046	6370259	-2.13

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324110 File : 09i22m00110 Time : 23-SEP-2009 06:25
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9761	ug/L	-2	10	
Antimony	A	0.0035	0.0028	100.0	99.03	ug/L	-1	10	
Barium	A	9.0E-4	7.5E-4	100.0	92.98	ug/L	-7	10	
Beryllium	A	0.0030	0.0027	100.0	92.86	ug/L	-7	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	95.47	ug/L	-5	10	
Calcium	A	3.6E-4	1.8E-4	10000	9631	ug/L	-4	10	
Lead	A	0.0082	0.0053	100.0	99.65	ug/L	0	10	
Magnesium	A	0.0036	0.0031	10000	9580	ug/L	-4	10	
Molybdenum	A	0.0020	0.0019	100.0	97.37	ug/L	-3	10	
Potassium	A	0.0224	0.0058	10000	9907	ug/L	-1	10	
Silver	A	0.0037	0.0035	100.0	102.2	ug/L	2	10	
Thallium	A	0.0076	0.0071	50.00	48.11	ug/L	-4	10	
Arsenic	E	0.0065	0.0058	100.0	99.63	ug/L	0	10	
Chromium	E	0.0774	0.0454	100.0	98.03	ug/L	-2	10	
Cobalt	E	0.0937	0.0870	100.0	99.21	ug/L	-1	10	
Copper	E	0.1331	0.0872	100.0	96.72	ug/L	-3	10	
Manganese	E	0.0182	0.0148	100.0	95.94	ug/L	-4	10	
Nickel	E	0.0315	0.0253	100.0	98.92	ug/L	-1	10	
Sodium	E	0.0103	0.0041	10000	9858	ug/L	-1	10	
Vanadium	E	0.0387	0.0335	100.0	97.07	ug/L	-3	10	
Zinc	E	0.0356	0.0091	100.0	96.70	ug/L	-3	10	
Iron	H	0.0091	0.0078	10000	9816	ug/L	-2	10	
Selenium	H	0.0011	0.0011	100.0	98.79	ug/L	-1	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1229576	-13.79
Scandium	A	4202107	3945454	-6.11
Scandium	E	35507	34444	-2.99
Scandium	H	1106706	1009302	-8.80
Germanium	H	302030	274927	-8.97
Germanium	E	28812	28414	-1.38
Indium	A	5178122	4931445	-4.76
Bismuth	A	3644746	3645550	0.02
Yttrium	A	5969850	5740356	-3.84
Terbium	A	6509046	6414958	-1.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324111 File : 09i22m00111 Time : 23-SEP-2009 06:35
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.06320]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03450]	0.05000	0.01103	ug/L	!ib
Arsenic	E	[0.05690]	0.1000	0.04565	ug/L	!ib
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[2.304]	10.00	0.8425	ug/L	!ib
Selenium	H	[0.06950]	0.1000	0.06175	ug/L	!ib

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1280800	-10.19
Scandium	A	4202107	3968879	-5.55
Scandium	E	35507	35069	-1.23
Scandium	H	1106706	1113851	0.65
Germanium	H	302030	299431	-0.86
Germanium	E	28812	28695	-0.41
Indium	A	5178122	5068785	-2.11
Bismuth	A	3644746	3718169	2.01
Yttrium	A	5969850	5780762	-3.17
Terbium	A	6509046	6462348	-0.72

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324121 File : 09i22m00121 Time : 23-SEP-2009 08:16
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9755	ug/L	-2	10	
Antimony	A	0.0035	0.0029	100.0	100.5	ug/L	1	10	
Barium	A	9.0E-4	7.5E-4	100.0	93.27	ug/L	-7	10	
Beryllium	A	0.0030	0.0027	100.0	94.09	ug/L	-6	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	96.45	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9781	ug/L	-2	10	
Lead	A	0.0082	0.0053	100.0	100.2	ug/L	0	10	
Magnesium	A	0.0036	0.0031	10000	9558	ug/L	-4	10	
Molybdenum	A	0.0020	0.0019	100.0	97.71	ug/L	-2	10	
Potassium	A	0.0224	0.0059	10000	9975	ug/L	0	10	
Silver	A	0.0037	0.0035	100.0	103.1	ug/L	3	10	
Thallium	A	0.0076	0.0072	50.00	49.20	ug/L	-2	10	
Arsenic	E	0.0065	0.0059	100.0	100.4	ug/L	0	10	
Chromium	E	0.0774	0.0459	100.0	99.18	ug/L	-1	10	
Cobalt	E	0.0937	0.0878	100.0	100.2	ug/L	0	10	
Copper	E	0.1331	0.0881	100.0	97.66	ug/L	-2	10	
Manganese	E	0.0182	0.0150	100.0	96.76	ug/L	-3	10	
Nickel	E	0.0315	0.0256	100.0	100.1	ug/L	0	10	
Sodium	E	0.0103	0.0041	10000	9874	ug/L	-1	10	
Vanadium	E	0.0387	0.0338	100.0	97.92	ug/L	-2	10	
Zinc	E	0.0356	0.0092	100.0	97.97	ug/L	-2	10	
Iron	H	0.0091	0.0078	10000	9783	ug/L	-2	10	
Selenium	H	0.0011	0.0011	100.0	99.70	ug/L	0	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1194850	-16.22
Scandium	A	4202107	3925713	-6.58
Scandium	E	35507	34006	-4.23
Scandium	H	1106706	1001998	-9.46
Germanium	H	302030	272587	-9.75
Germanium	E	28812	28053	-2.63
Indium	A	5178122	4921501	-4.96
Bismuth	A	3644746	3632458	-0.34
Yttrium	A	5969850	5739930	-3.85
Terbium	A	6509046	6442890	-1.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324124 File : 09i22m00124 Time : 23-SEP-2009 08:46
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.03610]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.01780]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[2.375]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1253777	-12.09
Scandium	A	4202107	3970312	-5.52
Scandium	E	35507	36450	2.66
Scandium	H	1106706	1018226	-7.99
Germanium	H	302030	280576	-7.10
Germanium	E	28812	29422	2.12
Indium	A	5178122	5051246	-2.45
Bismuth	A	3644746	3723588	2.16
Yttrium	A	5969850	5794642	-2.93
Terbium	A	6509046	6428234	-1.24

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324125 File : 09i22m00125 Time : 23-SEP-2009 08:58
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2862	0.1000	ug/L	!a+
Barium	A	1.379	0.1000	ug/L	!a+
Beryllium	A	[0.02470]	0.1000	ug/L	
Cadmium	A	2.893	0.1000	ug/L	!a+
Lead	A	1.249	0.1000	ug/L	!a+
Silver	A	0.1702	0.1000	ug/L	!a+
Thallium	A	0.08020	0.05000	ug/L	!a+
Arsenic	E	0.3493	0.1000	ug/L	!a+
Chromium	E	1.048	0.1000	ug/L	!a+
Cobalt	E	3.703	0.1000	ug/L	!a+
Copper	E	5.493	0.1000	ug/L	!a+
Manganese	E	6.349	0.1000	ug/L	!a+
Nickel	E	3.700	0.1000	ug/L	!a+
Vanadium	E	[0.07240]	0.1000	ug/L	!a+
Zinc	E	6.391	0.1000	ug/L	!a+
Selenium	H	0.2152	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	101700	ug/L	102
Calcium	A	300000	309800	ug/L	103
Magnesium	A	100000	97340	ug/L	97
Molybdenum	A	2000	1980	ug/L	99
Potassium	A	100000	103900	ug/L	104
Sodium	E	250000	244700	ug/L	98
Iron	H	250000	248900	ug/L	100

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1025341	-28.11
Scandium	A	4202107	3891478	-7.39
Scandium	E	35507	35408	-0.28
Scandium	H	1106706	1002899	-9.38
Germanium	H	302030	264253	-12.51
Germanium	E	28812	28774	-0.13
Indium	A	5178122	4446705	-14.13
Bismuth	A	3644746	2971566	-18.47
Yttrium	A	5969850	5568037	-6.73
Terbium	A	6509046	5939299	-8.75

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324126 File : 09i22m00126 Time : 23-SEP-2009 09:09
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104500	ug/L	5		
Cadmium	A	100.0	106.4	ug/L	6	20	
Calcium	A	300000	318400	ug/L	6		
Magnesium	A	100000	100700	ug/L	1		
Molybdenum	A	2000	2017	ug/L	1		
Potassium	A	100000	106500	ug/L	7		
Silver	A	50.00	52.94	ug/L	6	20	
Arsenic	E	100.0	109.6	ug/L	10	20	
Chromium	E	200.0	208.3	ug/L	4	20	
Cobalt	E	200.0	201.4	ug/L	1	20	
Copper	E	200.0	189.9	ug/L	-5	20	
Manganese	E	200.0	210.6	ug/L	5	20	
Nickel	E	200.0	195.2	ug/L	-2	20	
Sodium	E	250000	252700	ug/L	1		
Vanadium	E	200.0	211.3	ug/L	6	20	
Zinc	E	100.0	96.59	ug/L	-3	20	
Iron	H	250000	255500	ug/L	2		
Selenium	H	100.0	107.9	ug/L	8	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	989505	-10.59
Scandium	A	4202107	3839258	-8.63
Scandium	E	35507	34874	-1.78
Germanium	H	302030	262831	-12.98
Germanium	E	28812	28331	-1.67
Indium	A	5178122	4384688	-15.32
Yttrium	A	5969850	5504487	-7.80

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324157 File : 09i22m00157 Time : 23-SEP-2009 14:24
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2931	0.1000	ug/L	!a+
Barium	A	1.407	0.1000	ug/L	!a+
Beryllium	A	[0.03740]	0.1000	ug/L	
Cadmium	A	2.811	0.1000	ug/L	!a+
Lead	A	1.296	0.1000	ug/L	!a+
Silver	A	0.1759	0.1000	ug/L	!a+
Thallium	A	0.08730	0.05000	ug/L	!a+
Arsenic	E	0.3544	0.1000	ug/L	!a+
Chromium	E	1.080	0.1000	ug/L	!a+
Cobalt	E	3.721	0.1000	ug/L	!a+
Copper	E	5.222	0.1000	ug/L	!a+
Manganese	E	6.344	0.1000	ug/L	!a+
Nickel	E	3.790	0.1000	ug/L	!a+
Vanadium	E	[0.07860]	0.1000	ug/L	!a+
Zinc	E	6.280	0.1000	ug/L	!a+
Selenium	H	0.1985	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102200	ug/L	102
Calcium	A	300000	313300	ug/L	104
Magnesium	A	100000	98820	ug/L	99
Molybdenum	A	2000	2009	ug/L	100
Potassium	A	100000	104400	ug/L	104
Sodium	E	250000	246500	ug/L	99
Iron	H	250000	251600	ug/L	101

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1020364	-28.46
Scandium	A	4202107	3709798	-11.72
Scandium	E	35507	33304	-6.20
Scandium	H	1106706	952420	-13.94
Germanium	H	302030	254521	-15.73
Germanium	E	28812	27574	-4.30
Indium	A	5178122	4303585	-16.89
Bismuth	A	3644746	3047361	-16.39
Yttrium	A	5969850	5349324	-10.39
Terbium	A	6509046	5934739	-8.82

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324158 File : 09i22m00158 Time : 23-SEP-2009 14:34
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105300	ug/L	5		
Cadmium	A	100.0	106.7	ug/L	7	20	
Calcium	A	300000	317000	ug/L	6		
Magnesium	A	100000	101000	ug/L	1		
Molybdenum	A	2000	2041	ug/L	2		
Potassium	A	100000	105800	ug/L	6		
Silver	A	50.00	52.66	ug/L	5	20	
Arsenic	E	100.0	108.2	ug/L	8	20	
Chromium	E	200.0	212.4	ug/L	6	20	
Cobalt	E	200.0	205.1	ug/L	3	20	
Copper	E	200.0	188.4	ug/L	-6	20	
Manganese	E	200.0	215.5	ug/L	8	20	
Nickel	E	200.0	198.1	ug/L	-1	20	
Sodium	E	250000	256000	ug/L	2		
Vanadium	E	200.0	214.9	ug/L	7	20	
Zinc	E	100.0	98.09	ug/L	-2	20	
Iron	H	250000	258100	ug/L	3		
Selenium	H	100.0	106.5	ug/L	7	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	963020	-12.98
Scandium	A	4202107	3700622	-11.93
Scandium	E	35507	32995	-7.07
Germanium	H	302030	259410	-14.11
Germanium	E	28812	27659	-4.00
Indium	A	5178122	4292469	-17.10
Yttrium	A	5969850	5340506	-10.54

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324196 File : 09i22m00196 Time : 23-SEP-2009 20:56
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0041	10000	9538	ug/L	-5	10	
Antimony	A	0.0035	0.0028	100.0	98.10	ug/L	-2	10	
Barium	A	9.0E-4	7.5E-4	100.0	92.67	ug/L	-7	10	
Beryllium	A	0.0030	0.0026	100.0	91.47	ug/L	-9	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	95.87	ug/L	-4	10	
Calcium	A	3.6E-4	1.7E-4	10000	9525	ug/L	-5	10	
Lead	A	0.0082	0.0055	100.0	103.4	ug/L	3	10	
Magnesium	A	0.0036	0.0031	10000	9401	ug/L	-6	10	
Molybdenum	A	0.0020	0.0019	100.0	96.45	ug/L	-4	10	
Potassium	A	0.0224	0.0057	10000	9666	ug/L	-3	10	
Silver	A	0.0037	0.0034	100.0	99.73	ug/L	0	10	
Thallium	A	0.0076	0.0071	50.00	48.17	ug/L	-4	10	
Arsenic	E	0.0065	0.0058	100.0	98.31	ug/L	-2	10	
Chromium	E	0.0774	0.0448	100.0	96.81	ug/L	-3	10	
Cobalt	E	0.0937	0.0858	100.0	97.91	ug/L	-2	10	
Copper	E	0.1331	0.0860	100.0	95.39	ug/L	-5	10	
Manganese	E	0.0182	0.0148	100.0	95.99	ug/L	-4	10	
Nickel	E	0.0315	0.0249	100.0	97.30	ug/L	-3	10	
Sodium	E	0.0103	0.0040	10000	9639	ug/L	-4	10	
Vanadium	E	0.0387	0.0332	100.0	96.17	ug/L	-4	10	
Zinc	E	0.0356	0.0090	100.0	95.71	ug/L	-4	10	
Iron	H	0.0091	0.0076	10000	9540	ug/L	-5	10	
Selenium	H	0.0011	0.0010	100.0	96.88	ug/L	-3	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1196198	-16.13
Scandium	A	4202107	3804219	-9.47
Scandium	E	35507	33286	-6.26
Scandium	H	1106706	987430	-10.78
Germanium	H	302030	270618	-10.40
Germanium	E	28812	27443	-4.75
Indium	A	5178122	4930211	-4.79
Bismuth	A	3644746	3787231	3.91
Yttrium	A	5969850	5623227	-5.81
Terbium	A	6509046	6516118	0.11

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324197 File : 09i22m00197 Time : 23-SEP-2009 21:06
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[4.409]	10.00	4.378	ug/L	!ib
Antimony	A	[0.04570]	0.1000	0.03964	ug/L	!ib
Barium	A	[0.05710]	0.1000	0.05024	ug/L	!ib
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	[0.04080]	0.1000	0.03331	ug/L	!ib
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	[0.06600]	0.1000	0.05845	ug/L	!ib
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.08440]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	[0.03850]	0.1000	0.02719	ug/L	!ib
Thallium	A	0.06610	0.05000	0.01103	ug/L	ib ***
Arsenic	E	[0.05490]	0.1000	0.04565	ug/L	!ib
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	ND	0.1000	0.04127	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[4.304]	10.00	0.8425	ug/L	!ib
Selenium	H	[0.06990]	0.1000	0.06175	ug/L	!ib

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1253235	-12.13
Scandium	A	4202107	3810190	-9.33
Scandium	E	35507	33788	-4.84
Scandium	H	1106706	981713	-11.29
Germanium	H	302030	274314	-9.18
Germanium	E	28812	27956	-2.97
Indium	A	5178122	5038413	-2.70
Bismuth	A	3644746	3902608	7.07
Yttrium	A	5969850	5691578	-4.66
Terbium	A	6509046	6551501	0.65

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324205 File : 09i22m00205 Time : 23-SEP-2009 22:27
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0040	10000	9442	ug/L	-6	10	
Antimony	A	0.0035	0.0028	100.0	97.58	ug/L	-2	10	
Barium	A	9.0E-4	7.4E-4	100.0	92.58	ug/L	-7	10	
Beryllium	A	0.0030	0.0026	100.0	91.90	ug/L	-8	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	95.64	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9581	ug/L	-4	10	
Lead	A	0.0082	0.0055	100.0	103.6	ug/L	4	10	
Magnesium	A	0.0036	0.0030	10000	9281	ug/L	-7	10	
Molybdenum	A	0.0020	0.0019	100.0	96.85	ug/L	-3	10	
Potassium	A	0.0224	0.0056	10000	9623	ug/L	-4	10	
Silver	A	0.0037	0.0034	100.0	99.76	ug/L	0	10	
Thallium	A	0.0076	0.0070	50.00	47.83	ug/L	-4	10	
Arsenic	E	0.0065	0.0057	100.0	98.09	ug/L	-2	10	
Chromium	E	0.0774	0.0451	100.0	97.42	ug/L	-3	10	
Cobalt	E	0.0937	0.0863	100.0	98.43	ug/L	-2	10	
Copper	E	0.1331	0.0865	100.0	95.85	ug/L	-4	10	
Manganese	E	0.0182	0.0147	100.0	95.18	ug/L	-5	10	
Nickel	E	0.0315	0.0251	100.0	98.31	ug/L	-2	10	
Sodium	E	0.0103	0.0040	10000	9548	ug/L	-5	10	
Vanadium	E	0.0387	0.0332	100.0	96.20	ug/L	-4	10	
Zinc	E	0.0356	0.0091	100.0	96.62	ug/L	-3	10	
Iron	H	0.0091	0.0077	10000	9670	ug/L	-3	10	
Selenium	H	0.0011	0.0010	100.0	97.04	ug/L	-3	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1152183	-19.21
Scandium	A	4202107	3810284	-9.32
Scandium	E	35507	33188	-6.53
Scandium	H	1106706	980814	-11.38
Germanium	H	302030	271400	-10.14
Germanium	E	28812	27396	-4.91
Indium	A	5178122	4938717	-4.62
Bismuth	A	3644746	3810263	4.54
Yttrium	A	5969850	5619541	-5.87
Terbium	A	6509046	6524432	0.24

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324206 File : 09i22m00206 Time : 23-SEP-2009 22:37
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[4.568]	10.00	4.378	ug/L	!ib
Antimony	A	[0.04940]	0.1000	0.03964	ug/L	!ib
Barium	A	[0.05430]	0.1000	0.05024	ug/L	!ib
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	[0.04130]	0.1000	0.03331	ug/L	!ib
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	[0.05890]	0.1000	0.05845	ug/L	!ib
Magnesium	A	ND	10.00	5.023	ug/L	
Molybdenum	A	[0.08920]	0.1000	0.01307	ug/L	!ib
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	[0.04070]	0.1000	0.02719	ug/L	!ib
Thallium	A	0.07310	0.05000	0.01103	ug/L	ib ***
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Cobalt	E	ND	0.1000	0.05350	ug/L	
Copper	E	ND	0.1000	0.05106	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Vanadium	E	[0.04720]	0.1000	0.04127	ug/L	!ib
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[4.580]	10.00	0.8425	ug/L	!ib
Selenium	H	[0.07470]	0.1000	0.06175	ug/L	!ib

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1177955	-17.41
Scandium	A	4202107	3807623	-9.39
Scandium	E	35507	33526	-5.58
Scandium	H	1106706	976608	-11.76
Germanium	H	302030	273285	-9.52
Germanium	E	28812	28184	-2.18
Indium	A	5178122	5051431	-2.45
Bismuth	A	3644746	3906999	7.20
Yttrium	A	5969850	5696146	-4.58
Terbium	A	6509046	6601805	1.43

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324216 File : 09i22m00216 Time : 24-SEP-2009 00:19
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2931	0.1000	ug/L	!a+
Barium	A	1.405	0.1000	ug/L	!a+
Beryllium	A	[0.03060]	0.1000	ug/L	
Cadmium	A	2.852	0.1000	ug/L	!a+
Lead	A	1.328	0.1000	ug/L	!a+
Silver	A	0.1724	0.1000	ug/L	!a+
Thallium	A	0.1071	0.05000	ug/L	!a+
Arsenic	E	0.3436	0.1000	ug/L	!a+
Chromium	E	0.9963	0.1000	ug/L	!a+
Cobalt	E	3.656	0.1000	ug/L	!a+
Copper	E	5.686	0.1000	ug/L	!a+
Manganese	E	6.164	0.1000	ug/L	!a+
Nickel	E	3.717	0.1000	ug/L	!a+
Vanadium	E	[0.06490]	0.1000	ug/L	!a+
Zinc	E	6.281	0.1000	ug/L	!a+
Selenium	H	0.2416	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99280	ug/L	99
Calcium	A	300000	306700	ug/L	102
Magnesium	A	100000	95300	ug/L	95
Molybdenum	A	2000	1968	ug/L	98
Potassium	A	100000	101500	ug/L	102
Sodium	E	250000	238800	ug/L	96
Iron	H	250000	243200	ug/L	97

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1028358	-27.90
Scandium	A	4202107	3806505	-9.41
Scandium	E	35507	34890	-1.74
Scandium	H	1106706	1000795	-9.57
Germanium	H	302030	263138	-12.88
Germanium	E	28812	28602	-0.73
Indium	A	5178122	4419937	-14.64
Bismuth	A	3644746	3105197	-14.80
Yttrium	A	5969850	5486827	-8.09
Terbium	A	6509046	6041561	-7.18

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214922 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324217 File : 09i22m00217 Time : 24-SEP-2009 00:29
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	101800	ug/L	2		
Cadmium	A	100.0	105.5	ug/L	6	20	
Calcium	A	300000	312400	ug/L	4		
Magnesium	A	100000	97970	ug/L	-2		
Molybdenum	A	2000	1992	ug/L	0		
Potassium	A	100000	104200	ug/L	4		
Silver	A	50.00	51.87	ug/L	4	20	
Arsenic	E	100.0	106.6	ug/L	7	20	
Chromium	E	200.0	206.2	ug/L	3	20	
Cobalt	E	200.0	199.7	ug/L	0	20	
Copper	E	200.0	186.4	ug/L	-7	20	
Manganese	E	200.0	210.6	ug/L	5	20	
Nickel	E	200.0	193.0	ug/L	-3	20	
Sodium	E	250000	242500	ug/L	-3		
Vanadium	E	200.0	208.8	ug/L	4	20	
Zinc	E	100.0	95.60	ug/L	-4	20	
Iron	H	250000	251700	ug/L	1		
Selenium	H	100.0	105.2	ug/L	5	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	983134	-11.17
Scandium	A	4202107	3763480	-10.44
Scandium	E	35507	34362	-3.22
Germanium	H	302030	262507	-13.09
Germanium	E	28812	28278	-1.85
Indium	A	5178122	4413556	-14.77
Yttrium	A	5969850	5475856	-8.27

SAMPLE PREPARATION SUMMARY

Batch # : 155040
Started By : VV
Method : 200.8
Spike #1 ID : S12256

Prep Date : 17-SEP-2009 09:00
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214809-001		Water	50	50	1	1.0						TAL/ICP	
214809-002		Water	50	50	1	1.0						TAL/ICP	
214809-004		Water	50	50	1	1.0						TAL/ICP	
214865-001		Water	50	50	1	1.0						TAL/ICP	
214919-001		Water	50	50	1	1.0						CU, SE	
214919-003		Water	50	50	1	1.0						CU, SE	
214922-003		Water	50	50	1	1.0						TAL/ICP	
214922-004		Water	50	50	1	1.0						TAL/ICP	
214922-005		Water	50	50	1	1.0						(rebatched)	
214922-006		Water	50	50	1	1.0						(rebatched)	
214924-002		Water	50	50	1	1.0						TAL/ICP	
214924-003		Water	50	50	1	1.0						TAL/ICP	
214924-004		Water	50	50	1	1.0						TAL/ICP	
214924-005		Water	50	50	1	1.0						TAL/ICP	
214924-006		Water	50	50	1	1.0						TAL/ICP	
214924-007		Water	50	50	1	1.0						TAL/ICP	
214924-009		Water	50	50	1	1.0						TAL/ICP	
214940-002		Water	50	50	1	1.0						HARDNESS, TAL/ICP	
214940-003		Water	50	50	1	1.0						HARDNESS, TAL/ICP	
214940-004		Water	50	50	1	1.0						HARDNESS, TAL/ICP	
214947-001		Water	50	50	1	1.0						AG, AS, BE, CD, CR, CU, NI, PB, SB, SE, TL, ZN	
214947-002		Water	50	50	1	1.0						AG, AS, BE, CD, CR, CU, NI, PB, SB, SE, TL, ZN	
QC512570	BLANK	Water	50	50	1	1.0							
QC512571	BS	Water	50	50	1	1.0		.25	.25				
QC512572	BSD	Water	50	50	1	1.0		.25	.25				
QC512573	MS	Water	50	50	1	1.0		.25	.25				
QC512574	MSD	Water	50	50	1	1.0		.25	.25				
QC512575	SER	Water	50	50	1	1.0							
QC512576	PDS	Water	50	50	1	1.0							
QC512577	MS	Water	50	50	1	1.0		.25	.25				
QC512578	MSD	Water	50	50	1	1.0		.25	.25				

Reviewed by: JYF Date: 09/22/09

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 155040
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	QC	50	50	N	
* BS	↓	↓	↓	↓	
* BSD	↓	↓	↓	↓	
* 214809-001 MS	I				
* - 001 MSD	↓				
VV #1 - 001	↓				
* - 002 MS	A				
* - 002 MSD	↓				
- 002	↓				
10 - 004	A				
214865-001	E				
214919-001	A				
↓ - 003	D				
214922-003	G				
15 - 004	F				
~~- 005~~	~~E~~				NOT USED JVF 9/22
~~- 006~~	~~↓~~				
214924-002	G				
- 003	F				
20 - 004	↓				
- 005	E				
- 006	↓				
- 007	F				
- 009	G				
214940-002	I				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J79714-261	
0.25 mL of spike solution (Std1) was added to all spikes	S12256 *	VV 9-17-09
0.25 mL of spike solution (Std2) was added to all spikes	S12257 *	↓
digestion temperature (90-95 degrees C)	95°C	
digestion begun at (time)	1PM	
concentrated HCl	H19031 - JT Baker	
concentrated HNO3	H12072 - JT Baker	
digestion ended at (time)	7PM	
☐ filtered thru' Whatman # 541	—	
Relinquished to ICP group		

Prep Chemist / Date: 9-17-09

Continued from page 0
Continued on page 86

Reviewed by / Date: 9/21/09

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 155040
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
214940-003	H	50	50	n	
↓ -004	I	↓	↓	↓	
214947-001	L				
↓ -002	N				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J71714-261	
___ mL of spike solution (Std1) was added to all spikes	—	VV 9-17-09
___ mL of spike solution (Std2) was added to all spikes	—	
digestion temperature (90-95 degrees C)	95°C	
digestion begun at (time)	1PM	
concentrated HCl	H19031- JT Baker	
concentrated HNO3	H12022- JT Baker	
digestion ended at (time)	7PM	
☐ filtered thru' Whatman # 541	—	
Relinquished to ICP group		

9-17-09
Prep Chemist / Date

Continued from page 85
Continued on page 0

9/01/09
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 155149
Started By : MCB
Method : 3010A
Spike #1 ID : S12256

Prep Date : 21-SEP-2009 20:00
SOP Version : 3010A_icp_rv9
Spike #2 ID : S12257

Analysis : ICAP
Finished By : MCB
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214922-005		Water	50	50	1	1.0						TAL/ICP	
214922-006		Water	50	50	1	1.0						TAL/ICP	
215007-001		Water	50	50	1	1.0						T22/ICP	
215007-002		Water	50	50	1	1.0						T22/ICP	
215011-001		Water	50	50	1	1.0						HARDNESS	
215011-002		Water	50	50	1	1.0						HARDNESS	
215017-005		Water	50	50	1	1.0						RCRA/ICP	
215020-001		Filtrate	50	50	1	1.0						AS, BA, NI, PB, SE	
QC513001	BLANK	Water	50	50	1	1.0							
QC513002	BS	Water	50	50	1	1.0		.5	.5				
QC513003	BSD	Water	50	50	1	1.0		.5	.5				
QC513004	MS	Water	50	50	1	1.0		.5	.5				
QC513005	MSD	Water	50	50	1	1.0		.5	.5				
QC513006	SER	Water	50	50	1	1.0							
QC513007	PDS	Water	50	50	1	1.0							

Reviewed by: JYF Date: 09/23/09

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 155149
Digested by: MCB III
Date Digested: 9/21/09

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK2931
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Continued From: ___
Continued On: ___

Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK		50	50	N	
BS					
BSD					
MS-922-005	E				
MSD-922-005					
214922-005					
↓ -006	↓				
215011-001	B				
↓ -002	A				
215007-001	B				
↓ -002	D				
215017-005	B				
215020-001	J	↓	↓	↓	

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	J19714-261	
5 mL of spike solution (Std1) was added to all spikes	S122256	MCB III 9/21/09
5 mL of spike solution (Std2) was added to all spikes	S122257	↓
Digestion temperature (90-95 degrees C)	95°C	
Digestion started at (time)	8:00AM	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	H12022 SA BAKER	
1:1 HCl added to all samples	H19031 ↓	
Digestion ended at (time)	12:00AM	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group	ICP	↓

Michael Brooks 9/21/09
Prep Chemist Signature / Date

Reviewer Signature / Date

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 155149
Digested by: MCB III
Date Digested: 9/21/09

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK2931
Page 23
Continued From: ____
Continued On: ____

Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK		50	50	N	
BS					
BSD					
MS-922-005	E				
MSD-922-005					
214922-005					
↓ -006	↓				
215011-001	B				
↓ -002	A				
215007-001	B				
↓ -002	D				
215017-005	B				
215020-001	J	↓	↓	↓	

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	J-19714-261	
5 mL of spike solution (Std1) was added to all spikes	S12256	MCB III 9/21/09
5 mL of spike solution (Std2) was added to all spikes	S12257	↓
Digestion temperature (90-95 degrees C)	95°C	
Digestion started at (time)	8:00AM	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	H12022 A. BAKER	
1:1 HCl added to all samples	H19031 ↓	
Digestion ended at (time)	12:00AM	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group	ICP	↓

Michael Brooks 9/21/09
Prep Chemist Signature / Date

9/23/09
Reviewer Signature / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 49383762

Instrument : MET04 Begun : 09/23/09 12:02
Method : EPA 7470A SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	155194	ICALBLK	STD01REP1			09/23/09 12:02	1.0		
002	155194	ICAL	STD02REP1			09/23/09 12:04	1.0	1	
003	155194	ICAL	STD03REP1			09/23/09 12:06	1.0	1	
004	155194	ICAL	STD04REP1			09/23/09 12:09	1.0	1	
005	155194	ICAL	STD05REP1			09/23/09 12:11	1.0	1	
006	155194	ICAL	STD06REP1			09/23/09 12:13	1.0	1	
007	155194	ICV				09/23/09 12:16	1.0	2	
008	155194	ICB				09/23/09 12:19	1.0		
009	155194	BLANK	QC513191	Water	155194	09/23/09 12:21	1.0		
010	155194	BLANK	QC513197	TCLP Leachate	155194	09/23/09 12:23	1.0		
011	155194	BLANK	QC513200	WET Leachate	155194	09/23/09 12:25	1.0		
012	155194	BS	QC513192	Water	155194	09/23/09 12:28	1.0		
013	155194	BSD	QC513193	Water	155194	09/23/09 12:30	1.0		
014	155194	MSS	215019-005	Filtrate	155194	09/23/09 12:37	1.0		
015	155194	MS	QC513194	Filtrate	155194	09/23/09 12:39	1.0		
016	155194	MSD	QC513195	Filtrate	155194	09/23/09 12:42	1.0		
017	155194	SER	QC513196	Filtrate	155194	09/23/09 12:44	5.0		
018	155194	MSS	214933-002	TCLP Leachate	155194	09/23/09 12:46	1.0		
019	155194	CCV				09/23/09 12:48	1.0	3	
020	155194	CCB				09/23/09 12:50	1.0		
021	155194	MS	QC513198	TCLP Leachate	155194	09/23/09 12:53	1.0		
022	155194	MSD	QC513199	TCLP Leachate	155194	09/23/09 12:55	1.0		
023	155194	SAMPLE	214933-004	TCLP Leachate	155194	09/23/09 12:57	1.0		
024	155194	SAMPLE	215001-001	TCLP Leachate	155194	09/23/09 13:00	1.0		
025	155194	MSS	215001-001	WET Leachate	155194	09/23/09 13:02	1.0		
026	155194	MS	QC513201	WET Leachate	155194	09/23/09 13:04	1.0		
027	155194	MSD	QC513202	WET Leachate	155194	09/23/09 13:07	1.0		
028	155194	SAMPLE	214922-003	Water	155194	09/23/09 13:09	1.0		
029	155194	SAMPLE	214922-004	Water	155194	09/23/09 13:11	1.0		
030	155194	SAMPLE	214922-005	Water	155194	09/23/09 13:13	1.0		
031	155194	CCV				09/23/09 13:16	1.0	3	
032	155194	CCB				09/23/09 13:18	1.0		
033	155194	SAMPLE	214922-006	Water	155194	09/23/09 13:21	1.0		
034	155194	SAMPLE	215019-001	Filtrate	155194	09/23/09 13:23	1.0		
035	155194	SAMPLE	215019-006	Filtrate	155194	09/23/09 13:26	1.0		
036	155194	SAMPLE	215019-007	Filtrate	155194	09/23/09 13:28	1.0		
037	155194	SAMPLE	215019-008	Filtrate	155194	09/23/09 13:30	1.0		
038	155194	SAMPLE	215058-001	Filtrate	155194	09/23/09 13:33	1.0		
039	155194	SAMPLE	215058-002	Filtrate	155194	09/23/09 13:35	1.0		
040	155194	SAMPLE	215058-004	Filtrate	155194	09/23/09 13:37	1.0		
041	155194	SAMPLE	215058-005	Filtrate	155194	09/23/09 13:39	1.0		
042	155194	SAMPLE	215058-008	Filtrate	155194	09/23/09 13:42	1.0		
043	155194	CCV				09/23/09 13:44	1.0	3	
044	155194	CCB				09/23/09 13:46	1.0		
045	155194	SAMPLE	215058-009	Filtrate	155194	09/23/09 13:48	1.0		
046	155194	CCV				09/23/09 13:50	1.0	3	
047	155194	CCB				09/23/09 13:52	1.0		

WNH 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 40.

WNH 09/23/09 : I verified that the vials loaded on the instrument matched the

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 49383762

Instrument : MET04 Begun : 09/23/09 12:02
Method : EPA 7470A SOP Version : HG_water_rv12

sequence data entry, for runs 41 through 47.

Standards used: 1=S13004 2=S13006 3=S13007

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 METALS Water: EPA 7470A

Inst : MET04
Calnum : 49383762001
Units : ug/L

Date : 23-SEP-2009 12:02
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	155194	49383762002	STD02REP1	23-SEP-2009 12:04	S13004 (500X)
L2	155194	49383762003	STD03REP1	23-SEP-2009 12:06	S13004 (200X)
L3	155194	49383762004	STD04REP1	23-SEP-2009 12:09	S13004 (50X)
L4	155194	49383762005	STD05REP1	23-SEP-2009 12:11	S13004 (20X)
L5	155194	49383762006	STD06REP1	23-SEP-2009 12:13	S13004 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	2890.0	2624.0	2550.5	2476.2	2458.6	LINR	-0.0401	4.08E-4		2599.9	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-2	0.500	-1	2.000	2	5.000	0	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 METALS Water
EPA 7470A

Inst : MET04
Calnum : 49383762001 Cal Date : 23-SEP-2009 Type : WATER

ICV 49383762007 (23-SEP-2009) stds: S13006

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	5.200	ug/L	4	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762008 File : 155194 Time : 23-SEP-2009 12:19
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762019 File : 155194 Time : 23-SEP-2009 12:48
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER
Standards: S13007

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2599.9	2312.6	5.000	4.680	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762020 File : 155194 Time : 23-SEP-2009 12:50
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762031 File : 155194 Time : 23-SEP-2009 13:16
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER
Standards: S13007

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2599.9	2359.0	5.000	4.770	ug/L	-5	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762032 File : 155194 Time : 23-SEP-2009 13:18
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762043 File : 155194 Time : 23-SEP-2009 13:44
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER
Standards: S13007

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2599.9	2336.2	5.000	4.720	ug/L	-6	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49383762044 File : 155194 Time : 23-SEP-2009 13:46
Cal : 49383762001 Caldate : 23-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 155194
Started By : WNH
Method : METHOD
Spike #1 ID : S13004

Prep Date : 23-SEP-2009 09:26

Analysis : HG
Finished By : WNH
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214922-003		Water	50	50	1	1.0						TAL/HG	
214922-004		Water	50	50	1	1.0						TAL/HG	
214922-005		Water	50	50	1	1.0						TAL/HG	
214922-006		Water	50	50	1	1.0						TAL/HG	
214933-002		TCLP Leachate	10	50	1	5.0						TCLP/HG	
214933-004		TCLP Leachate	10	50	1	5.0						TCLP/HG	
215001-001		TCLP Leachate	10	50	1	5.0						TCLP/HG	
215001-001		WET Leachate	10	50	1	5.0						T22/HG	
215019-001		Filtrate	50	50	1	1.0						ZUMA/HG	
215019-005		Filtrate	50	50	1	1.0						ZUMA/HG	
215019-006		Filtrate	50	50	1	1.0						ZUMA/HG	
215019-007		Filtrate	50	50	1	1.0						ZUMA/HG	
215019-008		Filtrate	50	50	1	1.0						ZUMA/HG	
215058-001		Filtrate	50	50	1	1.0						T22/HG	
215058-002		Filtrate	50	50	1	1.0						T22/HG	
215058-004		Filtrate	50	50	1	1.0						T22/HG	
215058-005		Filtrate	50	50	1	1.0						T22/HG	
215058-008		Filtrate	50	50	1	1.0						T22/HG	
215058-009		Filtrate	50	50	1	1.0						T22/HG	
QC513191	BLANK	Water	50	50	1	1.0							
QC513192	BS	Water	50	50	1	1.0		1.25					
QC513193	BSD	Water	50	50	1	1.0		1.25					
QC513194	MS	Filtrate	50	50	1	1.0		1.25					
QC513195	MSD	Filtrate	50	50	1	1.0		1.25					
QC513196	SER	Filtrate	50	50	1	1.0							
QC513197	BLANK	TCLP Leachate	10	50	1	5.0							
QC513198	MS	TCLP Leachate	10	50	1	5.0		1.25					
QC513199	MSD	TCLP Leachate	10	50	1	5.0		1.25					
QC513200	BLANK	WET Leachate	10	50	1	5.0							
QC513201	MS	WET Leachate	10	50	1	5.0		1.25					
QC513202	MSD	WET Leachate	10	50	1	5.0		1.25					

Reviewed by: WNH Date: 09/23/09

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 155194

Date Digested: 9/23/09

Digestion Method

☑ EPA 7470A/ EPA 245.1

☐ _____

BK2911

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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
214922-003	G	50	50	N	
4	F				
5	E				
6	E				
214933-002	—	10			TCLP leach MSS
4	—				
215001-001	—				
215001-001	—				Wet Leach MSS
215019-001	A	50			
5					MSS
6					
7					
8	—				Comp
215058-001	G				
2	C				
4	D				
5	D				
8	G				
9	G				

9/23/09

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	EK09167	9/23/09
1.25 mL of spike solution was added to all spikes	S13004	
ICAL Source LIMS S#	S13005	
ICV / CCV LIMS S#	S13006 / S13007	
Digestion of Samples & Standards: Digestion Temperature (degrees C)	95°	
Digestion Started at (time)	0926	
concentrated H_2SO_4	G35026	
concentrated HNO_3	H12022	
5% $KMnO_4$	092209	
5% $K_2S_2O_8$	062209	
NaCl.hydroxylamine hydrochloride	090209	
Stannous Chloride	092109	
Digestion Completed at (time)	1126	
☐ filtered thru' 0.45 um syringe filter (lot #)		

9/23/09

Prep Chemist / Date

Continued from page ____

Continued on page 59

9/23/09

Reviewed by / Date

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 155194
Date Digested: 9/23/09

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

BK2911
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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
Blank QC513191		50	50	N	
BS 192					
BSD 193					
MS 194					
MSD 195					
Blank 197		10			TCLP
MS 198					
MSD 199					
Blank 200					WET
MS 201					
MSD 202					

9/23/09

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #		
_____ mL of spike solution was added to all spikes		
ICAL Source LIMS S#		
ICV / CCV LIMS S#		
Digestion Temperature (degrees C)		
Digestion Started at (time)		
concentrated H_2SO_4		
concentrated HNO_3		
5% $KMnO_4$		
5% $K_2S_2O_8$		
NaCl.hydroxylamine hydrochloride		
Stannous Chloride		
Digestion Completed at (time)		
☐ filtered thru' 0.45 um syringe filter (lot #)		

9/23/09
Prep Chemist / Date

Continued from page 58

Continued on page _____

9/23/09
Reviewed by / Date

Laboratory Job Number 214922

ANALYTICAL REPORT

Ion Chromatography

Matrix: Water

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Matrix:	Water	Received:	09/16/09
Units:	mg/L		

Field ID: ASE-23B-9C1 Lab ID: 214922-003
Type: SAMPLE Sampled: 09/15/09 03:00

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.32	0.10	1.000	155010	09/17/09 23:28	
Chloride	290	5.0	25.00	154937	09/17/09 05:10	D2
Nitrogen, Nitrate	1.8	0.05	1.000	154937	09/16/09 17:51	
Sulfate	120	5.0	10.00	154937	09/16/09 12:20	D2

Field ID: PL-201A-9C1 Lab ID: 214922-004
Type: SAMPLE Sampled: 09/15/09 03:39

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.37	0.10	1.000	155010	09/18/09 00:03	
Chloride	350	5.0	25.00	154937	09/17/09 06:37	D2
Nitrogen, Nitrate	ND	0.05	1.000	154937	09/16/09 18:43	
Sulfate	17	0.50	1.000	154937	09/16/09 18:43	

Field ID: ASE-65A-9C1 Lab ID: 214922-005
Type: SAMPLE Sampled: 09/15/09 04:27

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.85	0.10	1.000	155010	09/18/09 00:38	
Chloride	220	5.0	25.00	154937	09/16/09 14:05	D1
Nitrogen, Nitrate	4.4	0.05	1.000	154937	09/16/09 19:35	
Sulfate	130	5.0	10.00	154937	09/17/09 06:54	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Matrix:	Water	Received:	09/16/09
Units:	mg/L		

Field ID:	ASE-22B-9C1	Lab ID:	214922-006
Type:	SAMPLE	Sampled:	09/15/09 05:12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.24	0.10	1.000	155010	09/18/09 01:13	
Chloride	280	5.0	25.00	154937	09/16/09 14:22	D2
Nitrogen, Nitrate	7.4	0.25	5.000	154937	09/16/09 20:28	D2
Sulfate	170	2.5	5.000	154937	09/16/09 20:28	D2

Type:	BLANK	Batch#:	154937
Lab ID:	QC512157	Analyzed:	09/16/09 08:48
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Chloride	ND	0.20	
Nitrogen, Nitrate	ND	0.05	
Sulfate	ND	0.50	

Type:	BLANK	Batch#:	155010
Lab ID:	QC512434	Analyzed:	09/17/09 08:25
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Fluoride	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512158	Batch#:	154937
Matrix:	Water	Analyzed:	09/16/09 09:05
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Chloride	4.000	3.976	99	90-110	
Nitrogen, Nitrate	1.000	1.032	103	90-110	
Sulfate	10.00	10.12	101	90-110	

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	50.00
MSS Lab ID:	214920-002	Batch#:	154937
Matrix:	Water	Sampled:	09/15/09 11:35
Units:	mg/L	Received:	09/16/09

Type: MS Analyzed: 09/17/09 02:51
Lab ID: QC512200

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Chloride	571.7	100.0	687.5	116 NM	80-120	D2 M3
Nitrogen, Nitrate	<0.02889	25.00	27.62	110	80-120	D2
Sulfate	204.3	250.0	480.0	110	80-120	D2

Type: MSD Analyzed: 09/17/09 03:08
Lab ID: QC512201

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Chloride	100.0	686.4	115 NM	80-120	0	20	D2 M3
Nitrogen, Nitrate	25.00	26.87	107	80-120	3	20	D2
Sulfate	250.0	476.8	109	80-120	1	20	D2

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512435	Batch#:	155010
Matrix:	Water	Analyzed:	09/17/09 08:43
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	2.000	2.100	105	90-110	

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
MSS Lab ID:	214982-007	Batch#:	155010
Matrix:	Water	Sampled:	09/16/09 11:45
Units:	mg/L	Received:	09/17/09

Type: MS Analyzed: 09/17/09 19:57
Lab ID: QC512436

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	0.03843	5.000	5.031	100	80-120	D1

Type: MSD Analyzed: 09/17/09 20:15
Lab ID: QC512437

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Fluoride	5.000	5.247	104	80-120	4	20	D1

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 IC Water: EPA 300.0

Inst : IC01
Calnum : 609314572001
Units : mg/L

Name : ico1 ical 218
Date : 06-AUG-2009 11:27
X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	218_9	609314572009	L1	06-AUG-2009 11:27	S12185 (500X)
L2	218_10	609314572010	L2	06-AUG-2009 11:45	S12185 (250X)
L3	218_11	609314572011	L3	06-AUG-2009 12:02	S12185 (100X)
L4	218_12	609314572012	L4	06-AUG-2009 12:20	S12185 (25X)
L5	218_13	609314572013	L5	06-AUG-2009 12:37	S12185 (10X)
L6	218_14	609314572014	L6	06-AUG-2009 12:55	S12185 (5X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2557	0.2500	0.2715	0.2753	0.2843	0.3026	QORG		0.26664	0.003595	0.2732	1.000	0.990	
Chloride	0.2116	0.1966	0.2046	0.2030	0.2174	0.2378	QORG		0.19635	0.002075	0.2118	1.000	0.990	
Nitrogen, Nitrate	0.5119	0.5123	0.5161	0.5056	0.5255	0.5510	QORG		0.49875	0.010464	0.5204	1.000	0.990	
Sulfate	0.1616	0.1526	0.1571	0.1521	0.1619	0.1725	QORG		0.15021	4.469E-4	0.1596	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Fluoride	0.100	-4	0.200	-6	0.500	1	2.000	1	5.000	0	10.00	0
Chloride	0.200	7	0.400	0	1.000	3	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrate	0.050	3	0.100	2	0.250	3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	7	1.000	1	2.500	4	10.00	-2	25.00	0	50.00	0

JLM 08/06/09 : ical pts integrated to match previous icals

Analyst: JLM Date: 08/07/09 Reviewer: EAH Date: 08/10/09

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 IC Water
EPA 300.0

Inst : IC01 Name : ico1 ical 218
Calnum : 609314572001 Cal Date : 06-AUG-2009

ICV 609314572016 (218_16 06-AUG-2009) stds: S10785 (25X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.8000	0.7505	mg/L	-6	10	
Chloride	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	1.000	0.9624	mg/L	-4	10	
Sulfate	6.000	5.820	mg/L	-3	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214922 IC Water: EPA 300.0

Inst : IC03
Calnum : 629330432001
Units : mg/L

Name : IC 03 CAL 229
Date : 17-AUG-2009 14:28
X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	229_16	629330432016	L1	17-AUG-2009 14:28	S12185 (500X)
L2	229_17	629330432017	L2	17-AUG-2009 14:45	S12185 (250X)
L3	229_18	629330432018	L3	17-AUG-2009 15:02	S12185 (100X)
L4	229_19	629330432019	L4	17-AUG-2009 15:20	S12185 (25X)
L5	229_20	629330432020	L5	17-AUG-2009 15:37	S12185 (10X)
L6	229_21	629330432021	L6	17-AUG-2009 15:55	S12185 (5X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2540	0.2650	0.2415	0.2487	0.2634	0.2729	QORG		0.25033	0.002271	0.2576	1.000	0.990	
Chloride	0.1624	0.1644	0.1550	0.1641	0.1758	0.1897	QORG		0.16039	0.001470	0.1686	1.000	0.990	
Nitrogen, Nitrate	0.3701	0.3965	0.3888	0.4024	0.4149	0.4371	QORG		0.39277	0.008871	0.4016	1.000	0.990	
Sulfate	0.1152	0.1190	0.1162	0.1211	0.1267	0.1367	QORG		0.11680	3.969E-4	0.1225	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Fluoride	0.100	1	0.200	6	0.500	-4	2.000	-2	5.000	1	10.00	0
Chloride	0.200	1	0.400	2	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrate	0.050	-6	0.100	1	0.250	-2	1.000	0	2.500	0	5.000	0
Sulfate	0.500	-2	1.000	2	2.500	-1	10.00	0	25.00	0	50.00	0

MJB 08/17/09 : ICAL points integrated to match previous ICAL's.

JLM: 08/21/09 MJB: 08/21/09 CP: 08/21/09

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214922 IC Water
EPA 300.0

Inst : IC03 Name : IC 03 CAL 229
Calnum : 629330432001 Cal Date : 17-AUG-2009

ICV 629330432023 (229_23 17-AUG-2009) stds: S10785 (25X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.8000	0.7234	mg/L	-10	10	
Chloride	2.000	1.888	mg/L	-6	10	
Nitrogen, Nitrate	1.000	0.9247	mg/L	-8	10	
Sulfate	6.000	5.819	mg/L	-3	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC01 Run Name : L IDF : 1.0
Seqnum : 609374883011 File : 260_11 Time : 17-SEP-2009 08:03
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2823	0.5000	0.5257	mg/L	5	10	
Chloride	0.2118	0.1925	1.000	0.9703	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4974	0.2500	0.2480	mg/L	-1	10	
Sulfate	0.1596	0.1503	2.500	2.484	mg/L	-1	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609374883022 File : 260_22 Time : 17-SEP-2009 18:30
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2884	2.000	2.103	mg/L	5	10	
Chloride	0.2118	0.1983	4.000	3.880	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4890	1.000	0.9612	mg/L	-4	10	
Sulfate	0.1596	0.1475	10.00	9.550	mg/L	-4	10	

JLM 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609374883035 File : 260_35 Time : 17-SEP-2009 22:18
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2990	5.000	5.237	mg/L	5	10	
Chloride	0.2118	0.2094	10.00	9.676	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.5165	2.500	2.462	mg/L	-2	10	
Sulfate	0.1596	0.1554	25.00	24.14	mg/L	-3	10	

JLM 09/18/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609374883059 File : 260_59 Time : 18-SEP-2009 05:18
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2852	2.000	2.081	mg/L	4	10	
Chloride	0.2118	0.1974	4.000	3.864	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4954	1.000	0.9735	mg/L	-3	10	
Sulfate	0.1596	0.1477	10.00	9.561	mg/L	-4	10	

JLM 09/18/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : L IDF : 1.0
Seqnum : 629373385011 File : 259_11 Time : 16-SEP-2009 08:24
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2197	0.5000	0.4371	mg/L	**-13**	10	c- ***
Chloride	0.1686	0.1599	1.000	0.9879	mg/L	-1	10	
Nitrogen, Nitrate	0.4016	0.3845	0.2500	0.2434	mg/L	-3	10	
Sulfate	0.1225	0.1224	2.500	2.598	mg/L	4	10	

MJB 09/16/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/16/09 Reviewer: LW Date: 09/22/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629373385028 File : 259_28 Time : 16-SEP-2009 13:30
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2303	2.000	1.810	mg/L	-10	10	
Chloride	0.1686	0.1661	4.000	3.997	mg/L	0	10	
Nitrogen, Nitrate	0.4016	0.4164	1.000	1.036	mg/L	4	10	
Sulfate	0.1225	0.1225	10.00	10.14	mg/L	1	10	

JLM 09/16/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : H IDF : 1.0
Seqnum : 629373385039 File : 259_39 Time : 16-SEP-2009 16:41
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2392	5.000	4.588	mg/L	-8	10	
Chloride	0.1686	0.1744	10.00	9.962	mg/L	0	10	
Nitrogen, Nitrate	0.4016	0.4273	2.500	2.570	mg/L	3	10	
Sulfate	0.1225	0.1292	25.00	25.45	mg/L	2	10	

JLM 09/16/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629373385061 File : 259_61 Time : 16-SEP-2009 23:04
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2286	2.000	1.797	mg/L	-10	10	
Chloride	0.1686	0.1694	4.000	4.073	mg/L	2	10	
Nitrogen, Nitrate	0.4016	0.4299	1.000	1.069	mg/L	7	10	
Sulfate	0.1225	0.1268	10.00	10.48	mg/L	5	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : H IDF : 1.0
Seqnum : 629373385083 File : 259_83 Time : 17-SEP-2009 05:27
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2402	5.000	4.605	mg/L	-8	10	
Chloride	0.1686	0.1797	10.00	10.24	mg/L	2	10	
Nitrogen, Nitrate	0.4016	0.4421	2.500	2.655	mg/L	6	10	
Sulfate	0.1225	0.1333	25.00	26.20	mg/L	5	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629373385094 File : 259_94 Time : 17-SEP-2009 08:39
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2305	2.000	1.812	mg/L	-9	10	
Chloride	0.1686	0.1721	4.000	4.135	mg/L	3	10	
Nitrogen, Nitrate	0.4016	0.4370	1.000	1.086	mg/L	9	10	
Sulfate	0.1225	0.1284	10.00	10.61	mg/L	6	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS BLANK USER REPORT FOR 214922 IC Water
EPA 300.0

Inst : IC01 Run Name : QC512434 IDF : 1.0
Seqnum : 609374883012.1 File : 260_12 Time : 17-SEP-2009 08:25

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	u
Chloride	609314572001	06-AUG-2009	ND	0.2000	0.01164	mg/L	u
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	u
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	u

Analyst: MJB Date: 09/24/09 Reviewer: JLM Date: 09/29/09

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883023 File : 260_23 Time : 17-SEP-2009 18:47

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01925]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883036 File : 260_36 Time : 17-SEP-2009 22:35

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	[0.01634]	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.02480]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883060 File : 260_60 Time : 18-SEP-2009 05:35

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01355]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS BLANK USER REPORT FOR 214922 IC Water
EPA 300.0

Inst : IC03 Run Name : QC512157 IDF : 1.0
Seqnum : 629373385012.2 File : 259_12 Time : 16-SEP-2009 08:48

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	<c- ***
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	u
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	u
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	u

Analyst: MJB Date: 09/24/09 Reviewer: JLM Date: 09/29/09

-=low bias <=opening c=CCV u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385029 File : 259_29 Time : 16-SEP-2009 13:47

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385040 File : 259_40 Time : 16-SEP-2009 16:59

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385062 File : 259_62 Time : 16-SEP-2009 23:22

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385084 File : 259_84 Time : 17-SEP-2009 05:45

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214922 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385095 File : 259_95 Time : 17-SEP-2009 08:56

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609314572

Instrument : IC01 Begun : 08/06/09 10:52
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	218_7	X	BLK			08/06/09 10:52	1.0		
008	218_8	IB	CALIB			08/06/09 11:10	1.0		
009	218_9	ICAL	L1			08/06/09 11:27	1.0	1	
010	218_10	ICAL	L2			08/06/09 11:45	1.0	1	
011	218_11	ICAL	L3			08/06/09 12:02	1.0	1	
012	218_12	ICAL	L4			08/06/09 12:20	1.0	1	
013	218_13	ICAL	L5			08/06/09 12:37	1.0	1	
014	218_14	ICAL	L6			08/06/09 12:55	1.0	1	
015	218_15	ICB				08/06/09 13:12	1.0		
016	218_16	ICV				08/06/09 13:30	1.0	2	
017	218_17	CCB/MB	QC506475	Water	153603	08/06/09 13:47	1.0		
018	218_18	BS	QC506476	Water	153603	08/06/09 14:05	1.0	1	
019	218_19	BSD	QC506477	Water	153603	08/06/09 14:22	1.0	1	
020	218_20	SAMPLE	213964-004	Water	153603	08/06/09 14:40	1.0		1:CL=87
021	218_21	MSS	213983-001	Water	153603	08/06/09 15:05	2000		
022	218_22	MSS	213983-001	Water	153603	08/06/09 15:30	100.0		1:CL=130
023	218_23	X	BLK		153603	08/06/09 15:48	1.0		
024	218_24	MSS	213983-001	Water	153603	08/06/09 16:05	50.0		2:CL=200
025	218_25	X	BLK		153603	08/06/09 16:23	1.0		
026	218_26	MS	QC506482	Water	153603	08/06/09 16:40	2000	1	
027	218_27	MSD	QC506483	Water	153603	08/06/09 16:58	2000	1	
028	218_28	CCV	H		153603	08/06/09 17:16	1.0	1	
029	218_29	CCB			153603	08/06/09 17:33	1.0		
030	218_30	BLANK	QC506491	Soil	153606	08/06/09 17:51	1.0		
031	218_31	BS	QC506492	Soil	153606	08/06/09 18:08	1.0	1	
032	218_32	BSD	QC506493	Soil	153606	08/06/09 18:26	1.0	1	
033	218_33	SAMPLE	213697-016	Soil	153606	08/06/09 18:43	1.0		4:CL=57
034	218_34	X	BLK		153606	08/06/09 19:03	1.0		
035	218_35	SDUP	QC506494	Soil	153606	08/06/09 19:21	1.0		3:CL=55
036	218_36	X	BLK		153606	08/06/09 19:38	1.0		
037	218_37	MSS	213697-016	Soil	153606	08/06/09 19:56	5.0		
038	218_38	SDUP	QC506494	Soil	153606	08/06/09 20:13	5.0		
039	218_39	MSS	213697-016	Soil	153606	08/06/09 20:31	10.0		
040	218_40	SDUP	QC506494	Soil	153606	08/06/09 20:48	10.0		
041	218_41	CCV	M		153606	08/06/09 21:06	1.0	1	
042	218_42	CCB			153606	08/06/09 21:23	1.0		
043	218_43	X	CCV		153606	08/06/09 21:41	1.0	1	
044	218_44	X	CCB		153606	08/06/09 21:58	1.0		

JLM 08/06/09 : worked up through #16

JLM 08/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 7 through 44.

Analyst: JLM Date: 08/10/09 Reviewer: EAH Date: 08/10/09

Standards used: 1=S12185 2=S10785

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609374883

Instrument : IC01 Begun : 09/17/09 06:53
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	260_7	X	AS14A 10X			09/17/09 06:53	1.0		
008	260_8	X	BLK			09/17/09 07:11	1.0		
009	260_9	X	BLK			09/17/09 07:28	1.0		
010	260_10	X	BLK			09/17/09 07:46	1.0		
011	260_11	CCV	L			09/17/09 08:03	1.0	1	
012	260_12	CCB/MB	QC512434	Water	155010	09/17/09 08:25	1.0		
013	260_13	LCS	QC512435	Water	155010	09/17/09 08:43	1.0	1	
014	260_14	SAMPLE	214938-001	Water	155010	09/17/09 16:04	5.0		1:CL=53
015	260_15	MSS	214982-007	Water	155010	09/17/09 16:27	1.0		1:CL=23
016	260_16	SAMPLE	214982-008	Water	155010	09/17/09 16:45	1.0		1:CL=23
017	260_17	SAMPLE	214982-004	Water	155010	09/17/09 17:02	1.0		
018	260_18	SAMPLE	214982-006	Water	155010	09/17/09 17:20	1.0		
019	260_19	SAMPLE	214982-005	Water	155010	09/17/09 17:37	1.0		1:CL=21
020	260_20	SAMPLE	214982-003	Water	155010	09/17/09 17:55	1.0		
021	260_21	SAMPLE	214982-001	Water	155010	09/17/09 18:12	1.0		
022	260_22	CCV	M		155010	09/17/09 18:30	1.0	1	
023	260_23	CCB			155010	09/17/09 18:47	1.0		
024	260_24	SAMPLE	214982-002	Water	155010	09/17/09 19:05	1.0		
025	260_25	SAMPLE	214982-009	Water	155010	09/17/09 19:22	1.0		
026	260_26	MSS	214982-007	Water	155010	09/17/09 19:40	5.0		
027	260_27	MS	QC512436	Water	155010	09/17/09 19:57	5.0	1	
028	260_28	MSD	QC512437	Water	155010	09/17/09 20:15	5.0	1	
029	260_29	X	QC512436		155010	09/17/09 20:32	5.0	1	
030	260_30	X	QC512437		155010	09/17/09 20:50	5.0	1	
031	260_31	SAMPLE	214982-008	Water	155010	09/17/09 21:07	2.0		
032	260_32	SAMPLE	214982-005	Water	155010	09/17/09 21:25	2.0		
033	260_33	SAMPLE	214938-001	Water	155010	09/17/09 21:42	2.0		1:CL=110
034	260_34	X	BLK		155010	09/17/09 22:00	1.0		
035	260_35	CCV	H		155010	09/17/09 22:18	1.0	1	
036	260_36	CCB			155010	09/17/09 22:35	1.0		
037	260_37	X	CCV		155010	09/17/09 22:53	1.0	1	
038	260_38	X	CCB		155010	09/17/09 23:10	1.0		
039	260_39	SAMPLE	214922-003	Water	155010	09/17/09 23:28	1.0		2:CL=160
040	260_40	X	BLK		155010	09/17/09 23:45	1.0		
041	260_41	SAMPLE	214922-004	Water	155010	09/18/09 00:03	1.0		1:CL=180
042	260_42	X	BLK		155010	09/18/09 00:20	1.0		
043	260_43	SAMPLE	214922-005	Water	155010	09/18/09 00:38	1.0		2:CL=140
044	260_44	X	BLK		155010	09/18/09 00:55	1.0		
045	260_45	SAMPLE	214922-006	Water	155010	09/18/09 01:13	1.0		3:CL=160
046	260_46	X	BLK		155010	09/18/09 01:30	1.0		
047	260_47	SAMPLE	214924-002	Water	155010	09/18/09 01:48	1.0		3:CL=130
048	260_48	X	BLK		155010	09/18/09 02:05	1.0		
049	260_49	SAMPLE	214924-003	Water	155010	09/18/09 02:23	1.0		2:CL=140
050	260_50	X	BLK		155010	09/18/09 02:40	1.0		
051	260_51	SAMPLE	214924-004	Water	155010	09/18/09 02:58	1.0		2:CL=140
052	260_52	X	BLK		155010	09/18/09 03:15	1.0		
053	260_53	SAMPLE	214924-005	Water	155010	09/18/09 03:33	1.0		2:CL=130
054	260_54	X	BLK		155010	09/18/09 03:50	1.0		
055	260_55	SAMPLE	214924-006	Water	155010	09/18/09 04:08	1.0		2:CL=130
056	260_56	X	BLK		155010	09/18/09 04:25	1.0		
057	260_57	SAMPLE	214924-007	Water	155010	09/18/09 04:43	1.0		2:CL=130
058	260_58	X	BLK		155010	09/18/09 05:00	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609374883

Instrument : IC01 Begun : 09/17/09 06:53
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
059	260_59	CCV	M		155010	09/18/09 05:18	1.0	1	
060	260_60	CCB			155010	09/18/09 05:35	1.0		
061	260_61	X	CCV		155010	09/18/09 05:53	1.0	1	
062	260_62	X	CCB		155010	09/18/09 06:10	1.0		
063	260_63	BLANK	QC512630	Water	155056	09/18/09 06:28	1.0		
064	260_64	LCS	QC512631	Water	155056	09/18/09 06:45	1.0	1	
065	260_65	SAMPLE	214924-009	Water	155056	09/18/09 11:15	1.0		2:CL=170
066	260_66	X	BLK		155056	09/18/09 11:32	1.0		
067	260_67	X	BLK		155056	09/18/09 11:50	1.0		
068	260_68	CCV	H		155056	09/18/09 13:29	1.0	1	
069	260_69	CCB			155056	09/18/09 13:46	1.0		
070	260_70	SAMPLE	215022-002	Water	155056	09/18/09 15:26	1.0		
071	260_71	SAMPLE	215022-003	Water	155056	09/18/09 15:44	1.0		1:CL=35
072	260_72	SAMPLE	215022-005	Water	155056	09/18/09 16:01	1.0		1:CL=54
073	260_73	SAMPLE	215022-006	Water	155056	09/18/09 16:19	1.0		1:CL=45
074	260_74	SAMPLE	215022-007	Water	155056	09/18/09 16:36	1.0		1:CL=71
075	260_75	SAMPLE	215022-009	Water	155056	09/18/09 16:54	1.0		1:CL=54
076	260_76	SAMPLE	215022-010	Water	155056	09/18/09 17:11	1.0		1:CL=52
077	260_77	SAMPLE	215022-011	Water	155056	09/18/09 17:29	1.0		2:CL=40
078	260_78	SAMPLE	215022-012	Water	155056	09/18/09 17:46	1.0		1:CL=48
079	260_79	SAMPLE	215023-001	Water	155056	09/18/09 18:04	100.0		1:CL=26
080	260_80	CCV	M		155056	09/18/09 18:21	1.0	1	
081	260_81	CCB			155056	09/18/09 18:39	1.0		
082	260_82	MSS	215020-001	Water	155056	09/18/09 18:57	25.0		
083	260_83	SAMPLE	215022-011	Water	155056	09/18/09 19:14	2.0		1:CL=22
084	260_84	SAMPLE	215023-001	Water	155056	09/18/09 19:32	5.0		1:CL=240
085	260_85	X	BLK		155056	09/18/09 19:49	1.0		
086	260_86	X	BLK		155056	09/18/09 20:07	1.0		
087	260_87	MSS	215020-001	Water	155056	09/18/09 20:24	1.0		2:SO4=370
088	260_88	X	BLK		155056	09/18/09 20:42	1.0		
089	260_89	X	BLK		155056	09/18/09 20:59	1.0		
090	260_90	SAMPLE	215022-002	Water	155056	09/18/09 21:17	1.0		
091	260_91	MS	QC512715	Water	155056	09/18/09 21:34	25.0	1	
092	260_92	MSD	QC512716	Water	155056	09/18/09 21:52	25.0	1	
095	260_95	CCV	H		155056	09/18/09 22:44	1.0	1	
096	260_96	CCB			155056	09/18/09 23:02	1.0		
097	260_97	X	CCV		155056	09/18/09 23:19	1.0	1	
098	260_98	X	CCB		155056	09/18/09 23:37	1.0		
099	260_99	X	SHUTDOWN		155056	09/18/09 23:54	1.0		

MJB 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 99.

Analyst: MJB Date: 09/21/09 Reviewer: LW Date: 09/22/09

Standards used: 1=S12185

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629330432

Instrument : IC03 Begun : 08/17/09 11:12
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	229_7	X	AS14A 10X			08/17/09 11:12	1.0		
008	229_8	X	BLK			08/17/09 11:29	1.0		
009	229_9	X	BLK			08/17/09 11:47	1.0		
010	229_10	X	BLK			08/17/09 12:04	1.0		
011	229_11	X	L			08/17/09 12:45	1.0	1	
012	229_12	X	CCB/MB			08/17/09 13:08	1.0		
013	229_13	X	BS			08/17/09 13:25	1.0	1	
014	229_14	X	BSD			08/17/09 13:43	1.0	1	
015	229_15	IB	CALIB			08/17/09 14:10	1.0		
016	229_16	ICAL	L1			08/17/09 14:28	1.0	1	
017	229_17	ICAL	L2			08/17/09 14:45	1.0	1	
018	229_18	ICAL	L3			08/17/09 15:02	1.0	1	
019	229_19	ICAL	L4			08/17/09 15:20	1.0	1	
020	229_20	ICAL	L5			08/17/09 15:37	1.0	1	
021	229_21	ICAL	L6			08/17/09 15:55	1.0	1	
022	229_22	ICB				08/17/09 16:12	1.0		
023	229_23	ICV				08/17/09 16:29	1.0	2	
024	229_24	CCB/MB	QC508003	Water	153959	08/17/09 16:49	1.0		
025	229_25	BS	QC508004	Water	153959	08/17/09 17:06	1.0	1	
026	229_26	BSD	QC508005	Water	153959	08/17/09 17:24	1.0	1	
027	229_27	MSS	214186-001	Water	153959	08/17/09 18:08	25.0		
028	229_28	MS	QC508006	Water	153959	08/17/09 18:25	25.0	1	
029	229_29	MSD	QC508007	Water	153959	08/17/09 18:43	25.0	1	
030	229_30	CCV	M		153959	08/17/09 19:15	1.0	1	
031	229_31	CCB			153959	08/17/09 19:32	1.0		
032	229_32	X	CCV		153959	08/17/09 19:49	1.0	1	
033	229_33	X	CCB		153959	08/17/09 20:07	1.0		

MJB 08/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 15 through 33.

MJB: 08/17/09 JLM: 08/21/09 DMB: 08/21/09

Standards used: 1=S12185 2=S10785

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629373385

Instrument : IC03 Begun : 09/16/09 07:05
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	259_7	X	AS 14A 10X			09/16/09 07:05	1.0		
008	259_8	X	BLK			09/16/09 07:22	1.0		
009	259_9	X	BLK			09/16/09 07:39	1.0		
010	259_10	X	BLK			09/16/09 07:57	1.0		
011	259_11	CCV	L			09/16/09 08:24	1.0	1	
012	259_12	CCB/MB	QC512157	Water	154937	09/16/09 08:48	1.0		
013	259_13	LCS	QC512158	Water	154937	09/16/09 09:05	1.0	1	
014	259_14	SAMPLE	214902-001	Water	154937	09/16/09 09:23	1.0		1:CL=99
015	259_15	MSS	214920-002	Water	154937	09/16/09 09:40	50.0		
016	259_16	SAMPLE	214920-001	Water	154937	09/16/09 09:57	100.0		
017	259_17	MSS	214920-002	Water	154937	09/16/09 10:18	10.0		1:CL=52
018	259_18	MSS	214920-002	Water	154937	09/16/09 10:36	2.0		2:CL=170
019	259_19	X	BLK		154937	09/16/09 10:53	1.0		
020	259_20	X	BLK		154937	09/16/09 11:11	1.0		
021	259_21	SAMPLE	214920-001	Water	154937	09/16/09 11:28	2.0		1:CL=200
022	259_22	X	BLK		154937	09/16/09 11:45	1.0		
023	259_23	X	BLK		154937	09/16/09 12:03	1.0		
024	259_24	SAMPLE	214922-003	Water	154937	09/16/09 12:20	10.0		1:CL=29
025	259_25	SAMPLE	214922-004	Water	154937	09/16/09 12:38	10.0		1:CL=34
026	259_26	X	M		154937	09/16/09 12:55	1.0	1	
027	259_27	X			154937	09/16/09 13:12	1.0		
028	259_28	CCV	M		154937	09/16/09 13:30	1.0	1	
029	259_29	CCB			154937	09/16/09 13:47	1.0		
030	259_30	SAMPLE	214922-005	Water	154937	09/16/09 14:05	25.0		
031	259_31	SAMPLE	214922-006	Water	154937	09/16/09 14:22	25.0		
032	259_32	SAMPLE	214924-002	Water	154937	09/16/09 14:39	25.0		
033	259_33	SAMPLE	214924-003	Water	154937	09/16/09 14:57	25.0		
034	259_34	SAMPLE	214924-004	Water	154937	09/16/09 15:14	25.0		
035	259_35	SAMPLE	214924-005	Water	154937	09/16/09 15:32	25.0		
036	259_36	SAMPLE	214924-006	Water	154937	09/16/09 15:49	25.0		
037	259_37	SAMPLE	214924-007	Water	154937	09/16/09 16:06	25.0		
038	259_38	SAMPLE	214924-009	Water	154937	09/16/09 16:24	25.0		
039	259_39	CCV	H		154937	09/16/09 16:41	1.0	1	
040	259_40	CCB			154937	09/16/09 16:59	1.0		
041	259_41	SAMPLE	214940-002	Water	154937	09/16/09 17:16	5.0		
042	259_42	SAMPLE	214940-004	Water	154937	09/16/09 17:34	5.0		
043	259_43	SAMPLE	214922-003	Water	154937	09/16/09 17:51	1.0		2:CL=180
044	259_44	X	BLK		154937	09/16/09 18:08	1.0		
045	259_45	X	BLK		154937	09/16/09 18:26	1.0		
046	259_46	SAMPLE	214922-004	Water	154937	09/16/09 18:43	1.0		1:CL=200
047	259_47	X	BLK		154937	09/16/09 19:01	1.0		
048	259_48	X	BLK		154937	09/16/09 19:18	1.0		
049	259_49	SAMPLE	214922-005	Water	154937	09/16/09 19:35	1.0		2:CL=150
050	259_50	X	BLK		154937	09/16/09 19:53	1.0		
051	259_51	X	BLK		154937	09/16/09 20:10	1.0		
052	259_52	SAMPLE	214922-006	Water	154937	09/16/09 20:28	5.0		1:CL=52
053	259_53	SAMPLE	214924-002	Water	154937	09/16/09 20:45	5.0		1:CL=41
054	259_54	SAMPLE	214924-003	Water	154937	09/16/09 21:02	1.0		2:CL=160
055	259_55	X	BLK		154937	09/16/09 21:20	1.0		
056	259_56	X	BLK		154937	09/16/09 21:37	1.0		
057	259_57	SAMPLE	214924-004	Water	154937	09/16/09 21:55	5.0		1:CL=44
058	259_58	SAMPLE	214924-005	Water	154937	09/16/09 22:12	1.0		2:CL=140

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629373385

Instrument : IC03 Begun : 09/16/09 07:05
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
059	259_59	X	BLK		154937	09/16/09 22:30	1.0		
060	259_60	X	BLK		154937	09/16/09 22:47	1.0		
061	259_61	CCV	M		154937	09/16/09 23:04	1.0	1	
062	259_62	CCB			154937	09/16/09 23:22	1.0		
063	259_63	X	CCV		154937	09/16/09 23:39	1.0	1	
064	259_64	X	CCB		154937	09/16/09 23:57	1.0		
065	259_65	SAMPLE	214924-006	Water	154937	09/17/09 00:14	1.0		2:CL=150
066	259_66	X	BLK		154937	09/17/09 00:31	1.0		
067	259_67	X	BLK		154937	09/17/09 00:49	1.0		
068	259_68	SAMPLE	214924-007	Water	154937	09/17/09 01:06	1.0		2:CL=150
069	259_69	X	BLK		154937	09/17/09 01:24	1.0		
070	259_70	X	BLK		154937	09/17/09 01:41	1.0		
071	259_71	SAMPLE	214924-009	Water	154937	09/17/09 01:58	1.0		2:CL=180
072	259_72	X	BLK		154937	09/17/09 02:16	1.0		
073	259_73	X	BLK		154937	09/17/09 02:33	1.0		
074	259_74	MS	QC512200	Water	154937	09/17/09 02:51	50.0	1	
075	259_75	MSD	QC512201	Water	154937	09/17/09 03:08	50.0	1	
076	259_76	X	QC512200		154937	09/17/09 03:26	50.0	1	
077	259_77	X	QC512201		154937	09/17/09 03:43	50.0	1	
078	259_78	SAMPLE	214940-002	Water	154937	09/17/09 04:00	1.0		2:SO4=92
079	259_79	X	BLK		154937	09/17/09 04:18	1.0		
080	259_80	SAMPLE	214940-004	Water	154937	09/17/09 04:35	1.0		2:SO4=60
081	259_81	X	BLK		154937	09/17/09 04:53	1.0		
082	259_82	SAMPLE	214922-003	Water	154937	09/17/09 05:10	25.0		
083	259_83	CCV	H		154937	09/17/09 05:27	1.0	1	
084	259_84	CCB			154937	09/17/09 05:45	1.0		
085	259_85	X	CCV		154937	09/17/09 06:02	1.0	1	
086	259_86	X	CCB		154937	09/17/09 06:20	1.0		
087	259_87	SAMPLE	214922-004	Water	154937	09/17/09 06:37	25.0		
088	259_88	SAMPLE	214922-005	Water	154937	09/17/09 06:54	10.0		1:CL=22
089	259_89	SAMPLE	214924-003	Water	154937	09/17/09 07:12	5.0		1:CL=45
090	259_90	SAMPLE	214924-005	Water	154937	09/17/09 07:29	10.0		1:CL=20
091	259_91	SAMPLE	214924-006	Water	154937	09/17/09 07:47	10.0		1:CL=22
092	259_92	SAMPLE	214924-007	Water	154937	09/17/09 08:04	10.0		1:CL=22
093	259_93	SAMPLE	214924-009	Water	154937	09/17/09 08:22	10.0		1:CL=30
094	259_94	CCV	M		154937	09/17/09 08:39	1.0	1	
095	259_95	CCB			154937	09/17/09 08:56	1.0		
096	259_96	X	CCV		154937	09/17/09 09:14	1.0	1	
097	259_97	BLANK	QC512410	Water	155004	09/17/09 09:31	1.0		
098	259_98	LCS	QC512411	Water	155004	09/17/09 09:49	1.0	1	
099	259_99	SAMPLE	214955-002	Water	155004	09/17/09 10:49	1.0		
100	259_100	MSS	214955-003	Water	155004	09/17/09 11:07	50.0		
101	259_101	SAMPLE	214955-005	Water	155004	09/17/09 11:24	25.0		
102	259_102	SAMPLE	214955-001	Water	155004	09/17/09 11:41	25.0		
103	259_103	MSS	214955-003	Water	155004	09/17/09 11:59	1.0		1:CL=160
104	259_104	X	BLK		155004	09/17/09 12:16	1.0		
105	259_105	SAMPLE	214955-001	Water	155004	09/17/09 12:34	1.0		1:CL=100
106	259_106	X	BLK		155004	09/17/09 12:51	1.0		
107	259_107	SAMPLE	214955-005	Water	155004	09/17/09 13:09	1.0		2:CL=180
108	259_108	X	BLK		155004	09/17/09 13:26	1.0		
109	259_109	X	BLK		155004	09/17/09 13:43	1.0		
110	259_110	CCV	H		155004	09/17/09 14:01	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629373385

Instrument : IC03 Begun : 09/16/09 07:05
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
111	259_111	CCB			155004	09/17/09 14:18	1.0		
112	259_112	MS	QC512412	Water	155004	09/17/09 15:52	50.0	1	
113	259_113	MSD	QC512413	Water	155004	09/17/09 16:09	50.0	1	
114	259_114	SAMPLE	214955-005	Water	155004	09/17/09 16:27	10.0		1:CL=31
115	259_115	MSS	214983-006	Water	155004	09/17/09 17:19	10.0		
116	259_116	SAMPLE	214983-002	Water	155004	09/17/09 17:39	10.0		1:CL=28
117	259_117	SAMPLE	214983-003	Water	155004	09/17/09 17:56	10.0		1:CL=45
118	259_118	SAMPLE	214983-004	Water	155004	09/17/09 18:14	5.0		
119	259_119	SAMPLE	214983-005	Water	155004	09/17/09 18:31	5.0		
120	259_120	SAMPLE	214983-007	Water	155004	09/17/09 18:49	5.0		
121	259_121	MSS	214983-006	Water	155004	09/17/09 19:06	1.0		2:SO4=95
122	259_122	X	BLK		155004	09/17/09 19:23	1.0		
123	259_123	CCV	M		155004	09/17/09 19:41	1.0	1	
124	259_124	CCB			155004	09/17/09 19:58	1.0		
125	259_125	X	CCV		155004	09/17/09 20:16	1.0	1	
126	259_126	X	CCB		155004	09/17/09 20:33	1.0		
127	259_127	SAMPLE	214983-002	Water	155004	09/17/09 20:50	1.0		2:SO4=260
128	259_128	X	BLK		155004	09/17/09 21:08	1.0		
129	259_129	X	BLK		155004	09/17/09 21:25	1.0		
130	259_130	SAMPLE	214983-003	Water	155004	09/17/09 21:43	1.0		2:SO4=290
131	259_131	X	BLK		155004	09/17/09 22:00	1.0		
132	259_132	X	BLK		155004	09/17/09 22:18	1.0		
133	259_133	SAMPLE	214983-004	Water	155004	09/17/09 22:35	1.0		2:CL=76
134	259_134	X	BLK		155004	09/17/09 22:52	1.0		
135	259_135	SAMPLE	214983-005	Water	155004	09/17/09 23:10	1.0		2:SO4=81
136	259_136	X	BLK		155004	09/17/09 23:27	1.0		
137	259_137	SAMPLE	214983-007	Water	155004	09/17/09 23:45	1.0		2:SO4=71
138	259_138	X	BLK		155004	09/18/09 00:02	1.0		
139	259_139	SAMPLE	214983-008	Water	155004	09/18/09 00:19	1.0		2:SO4=71
140	259_140	X	BLK		155004	09/18/09 00:37	1.0		
141	259_141	MS	QC512506	Water	155004	09/18/09 00:54	10.0	1	
142	259_142	MSD	QC512507	Water	155004	09/18/09 01:12	10.0	1	
143	259_143	X	QC512506		155004	09/18/09 01:29	10.0	1	
144	259_144	X	QC512507		155004	09/18/09 01:46	10.0	1	
145	259_145	CCV	H		155004	09/18/09 02:04	1.0	1	
146	259_146	CCB			155004	09/18/09 02:21	1.0		
147	259_147	X	CCV		155004	09/18/09 02:39	1.0	1	
148	259_148	X	CCB		155004	09/18/09 02:56	1.0		
149	259_149	SAMPLE	214983-002	Water	155004	09/18/09 03:13	25.0		
150	259_150	SAMPLE	214983-003	Water	155004	09/18/09 03:31	50.0		
151	259_151	SAMPLE	214983-008	Water	155004	09/18/09 03:48	5.0		
152	259_152	CCV	M		155004	09/18/09 04:06	1.0	1	
153	259_153	CCB			155004	09/18/09 04:23	1.0		

JLM 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 7 through 153.

LW 09/22/09 : Sequence reviewed through file 259_95

Analyst: JLM Date: 09/18/09 Reviewer: _____ Date: _____

Standards used: 1=S12185

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 154957
Date Started: 9/16/09
Prep Chemist: MSB

BK 2918
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	214902-001 A	.56	1x	S	
2	214920-001 J	3.38	2x/100x	↓	
3	↓ -002 AA	2.95	2x/10x/50x	↓	MSS
4	214922-003 D	1.43	1x/10x/25x	↓	
5	↓ -004 ↓	1.78	1x/10x/25x	↓	
6	↓ -005 ↓	1.44	1x/10x/25x	↓	
7	↓ -006 ↓	1.73	5x/25x	↓	
8	214924-002 D	1.18	5x/25x	↓	
9	↓ -003 ↓	1.48	1x/25x	↓	
10	↓ -004 ↓	1.48	5x/25x	↓	
11	↓ -005 ↓	1.37	1x/25x	↓	
12	↓ -006 ↓	1.48	1x/25x	↓	
13	↓ -007 ↓	1.48	1x/25x	↓	
14	↓ -009 ↓	1.62	1x/25x	↓	
15	214940-002 J	.87	1x/5x	↓	
16	↓ -004 J	.70	1x/5x	↓	
17	Blank QC 512157	N/A	1x	N/A	
18	~~BS~~ LCS 158	↓	↓	↓	
19	~~BSD~~ MS 158 200	2.95	50x	5	
20	MSD ↓ 201	↓	↓	↓	
					MSB 9/17/09

		Mfg & Lot # / Time / Program	Initials / Date
LCS MSB 9/17/09	Eluent Reagent ID	100x JM 9/5/09	MSB 9/17/09
~~BS/BSD~~ Spiked with	.2 mL of :	512185	↓
MS/MSD Spiked with	.1 mL of :	512185	↓
Filters Used:	Ag: OnGuard II Ag	N/A	↓
	Na: OnGuard II Na	↓	↓
	P: OnGuard II P	↓	↓
	RP: OnGuard II RP	↓	↓
	S: (0.20um)/0.45um	Sartorius #16352	↓

MSB 9/17/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

9/21/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 155010
Date Started: 9/17/09
Prep Chemist: MJB

BK 2918
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	214922-003 D	1.43	1x	S	
2	004	1.78			
3	005	1.44			
4	006	1.73			
5	214924-002	1.18			
6	003	1.48			
7	004	1.48			
8	005	1.37			
9	006	1.48			
10	007				
11	214938-001 A	1.19	2x/5x		
12	214982-001 E	0.11	1x		
13	002 E	0.09			
14	003 D	0.19			
15	004 D	0.28			
16	005 D	0.23	1x/2x		
17	006 D	0.13	1x		
18	007 L	0.25	1x/5x		MSS
19	008 D	0.22	1x/2x		
20	009 E	0.02	1x		
	MB QC512434	N/A	1x	N/A	
	LCS 5				
	MS 6	0.25	5x	S	
	MSD 7				

LCS JLM 9/18/09
~~BS/BS~~D Spiked with 0.2 mL of :
MS/MSD Spiked with 0.1 mL of :
Filters Used:

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x JLM 9/5/09	JLM 9/18/09
Ag: OnGuard II Ag	512185	
Na: OnGuard II Na	N/A	
P: OnGuard II P		
RP: OnGuard II RP		
S: (0.20um) 0.45um	Sartorius #16852	

9/18/09
Extraction Chemist / Date

Continued from page ____
Continued on page ____

9/18/09
Reviewed by / Date

Laboratory Job Number 214922

ANALYTICAL REPORT

Wet Chemistry

Matrix: Water

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	09/15/09
Units:	mg/L	Received:	09/16/09
Batch#:	155385	Analyzed:	09/28/09

Field ID: ASE-23B-9C1 Lab ID: 214922-003
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	260	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	260	6.7	

Field ID: PL-201A-9C1 Lab ID: 214922-004
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	460	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	460	6.7	

Field ID: ASE-65A-9C1 Lab ID: 214922-005
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	280	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	280	6.7	

Field ID: ASE-22B-9C1 Lab ID: 214922-006
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	310	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	310	6.7	

Type: BLANK Diln Fac: 1.000
Lab ID: QC513978

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	ND	1.0	
Alkalinity, Carbonate	ND	1.0	
Alkalinity, Hydroxide	ND	1.0	
Alkalinity, Total as CaCO3	ND	1.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC513979	Batch#:	155385
Matrix:	Water	Analyzed:	09/28/09

Spiked	Result	%REC	Limits	ADEQ Flags
200.0	186.4	93	90-100	

54.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	155385
MSS Lab ID:	214920-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	mg/L	Analyzed:	09/28/09

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC513980	490.7	200.0	680.0	95	80-120			
MSD	QC513981		200.0	684.0	97	80-120	1	25	

RPD= Relative Percent Difference

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 155385
Date Started: 28-SEP-2009
Batched by : Shu Ting Liu

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
214920-001			Parsons Infrastruc	Water	ALKALINITY	28-SEP-2009
214920-002			Parsons Infrastruc	Water	ALKALINITY	28-SEP-2009
214922-003			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214922-004			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214922-005			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214922-006			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-002			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-003			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-004			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-005			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-006			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-007			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-009			CH2M Hill	Water	ALKALINITY	28-SEP-2009
215083-001			Shaw E&I	Water	ALKALINITY	28-SEP-2009
215083-002			Shaw E&I	Water	ALKALINITY	28-SEP-2009
215084-001			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215084-002			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215084-003			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215100-001			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215100-002			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
QC513978	BLANK			Water	ALKALINITY	
QC513979	LCS			Water	ALKALINITY	
QC513980	MS	of 214920-002		Water	ALKALINITY	
QC513981	MSD	of 214920-002		Water	ALKALINITY	

Analysis: **Alkalinity**
Method: **EPA 310.1 / SMWW 2320B**
SOP#: Alkalinity_rv 8.doc

Analyst: STL
Analysis Date: **09/28/09**
Batch No: **155385**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

SAMPLE & BATCH QC	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as $CaCO_3$ (mg/L)	Low Alkalinity (pH 4.5 - 4.2) Volume (mL)	Low Alkalinity as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)	% Rec.	% RPD
MB	6.3	100	0.00	0.08	ND			1.0		
LCS	10.2	25	2.12	4.66	186.40			4.0	93	
214920-002	7.7	15	0.00	7.36	490.67		n/a	6.7		
MS	9.1	25	1.78	17.00	680.00			4.0	95	
MSD	9.1	25	1.82	17.10	684.00			4.0	97	1
214920-001	7.3	15	0.00	10.71	714.00		n/a	6.7		
214920-002	7.7	15	0.00	7.36	490.67		n/a	6.7		
214922-003	7.5	15	0.00	3.86	257.33		n/a	6.7		
214922-004	7.1	15	0.00	6.92	461.33		n/a	6.7		
214922-005	7.8	15	0.00	4.24	282.67		n/a	6.7		
214922-006	7.4	15	0.00	4.65	310.00		n/a	6.7		
214924-002	7.4	15	0.00	3.05	203.33		n/a	6.7		
214924-003	7.5	15	0.00	4.74	316.00		n/a	6.7		
214924-004	7.5	15	0.00	4.80	320.00		n/a	6.7		
214924-005	7.7	15	0.00	4.33	288.67		n/a	6.7		
214924-006	7.5	15	0.00	4.32	288.00		n/a	6.7		
214924-007	7.4	15	0.00	4.40	293.33		n/a	6.7		
214924-009	7.3	15	0.00	3.79	252.67		n/a	6.7		
215083-001	8.4	15	0.10	8.14	542.67		n/a	6.7		
215083-002	6.2	15	0.00	10.51	700.67		n/a	6.7		
215084-001	6.8	15	0.00	4.97	331.33		n/a	6.7		
215084-002	6.9	15	0.00	18.53	1235.33		n/a	6.7		
215084-003	7.1	15	0.00	8.70	580.00		n/a	6.7		
215100-001	7.2	15	0.00	3.55	236.67		n/a	6.7		
215100-002	7.1	15	0.00	3.50	233.33		n/a	6.7		

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: DMB 9/28/09

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Curtis Tompkins, Ltd.

Template: F:\inorgan\wetstuf\alkalinity.xls
Ver.8.8, Effective 1/28/08

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: STL
Analysis Date: 09/28/09
Batch No: 155385

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as $CaCO_3$ (mg/L)	Carbonate Alkalinity as $CaCO_3$ (mg/L)	Hydroxide Alkalinity as $CaCO_3$ (mg/L)
214920-001	0.0	714.00	714.000	714.000	0.000	0.000
214920-002	0.0	490.67	490.667	490.667	0.000	0.000
214922-003	0.0	257.33	257.333	257.333	0.000	0.000
214922-004	0.0	461.33	461.333	461.333	0.000	0.000
214922-005	0.0	282.67	282.667	282.667	0.000	0.000
214922-006	0.0	310.00	310.000	310.000	0.000	0.000
214924-002	0.0	203.33	203.333	203.333	0.000	0.000
214924-003	0.0	316.00	316.000	316.000	0.000	0.000
214924-004	0.0	320.00	320.000	320.000	0.000	0.000
214924-005	0.0	288.67	288.667	288.667	0.000	0.000
214924-006	0.0	288.00	288.000	288.000	0.000	0.000
214924-007	0.0	293.33	293.333	293.333	0.000	0.000
214924-009	0.0	252.67	252.667	252.667	0.000	0.000
215083-001	6.7	536.00	542.667	529.333	13.333	0.000
215083-002	0.0	700.67	700.667	700.667	0.000	0.000
215084-001	0.0	331.33	331.333	331.333	0.000	0.000
215084-002	0.0	1235.33	1235.333	1235.333	0.000	0.000
215084-003	0.0	580.00	580.000	580.000	0.000	0.000
215100-001	0.0	236.67	236.667	236.667	0.000	0.000
215100-002	0.0	233.33	233.333	233.333	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 09/28/09 H_2SO_4 Normality = 0.02
Method: **EPA 310.1** Batch No: 155385 Analyst: STL

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
214920-001	714.000	870.542	0.000	0.000
214920-002	490.667	598.244	0.000	0.000
214922-003	257.333	313.753	0.000	0.000
214922-004	461.333	562.479	0.000	0.000
214922-005	282.667	344.641	0.000	0.000
214922-006	310.000	377.967	0.000	0.000
214924-002	203.333	247.914	0.000	0.000
214924-003	316.000	385.282	0.000	0.000
214924-004	320.000	390.159	0.000	0.000
214924-005	288.667	351.956	0.000	0.000
214924-006	288.000	351.143	0.000	0.000
214924-007	293.333	357.646	0.000	0.000
214924-009	252.667	308.063	0.000	0.000
215083-001	542.667	645.388	7.996	0.000
215083-002	700.667	854.286	0.000	0.000
215084-001	331.333	403.977	0.000	0.000
215084-002	1235.333	1506.177	0.000	0.000
215084-003	580.000	707.163	0.000	0.000
215100-001	236.667	288.555	0.000	0.000
215100-002	233.333	284.491	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook | EPA 310.1 / SMWW 2320B | Curtis & Tompkins, Ltd.

LIMS Batch #: 155385
Matrix: STL

Date: 9/28/09
Time: 12:35

Benchbook#: BK2922
Page: 14

C[illegible]4.0: LIMS#: 511916
C[illegible]7.0: LIMS#: 597872
[illegible]8.0: LIMS#: 592189
[illegible]its 92 - 102): 100.4

NaCO3 Vol Spiked (mL): 5
NaCO3 Std Conc (mg/L): 1000
NaCO3 LIMS#: 512146
H_2SO_4 Normality: 0.0200
H_2SO_4 Reagent ID: RICCA-1906170

Container ID		Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
		6.3	100	—	0.08		
						SC 9/28/09	
[illegible]LCS		10.2	25	2.12	4.66		
[illegible]0-001	F	7.3	15	—	10.71		
-002	A	7.7	15	—	7.36		
[illegible]-002		9.1	25	1.78	17.00		
[illegible]-002		9.1	25	1.82	17.10		
[illegible]2-003	E	7.5	15	—	3.86		
-004	G	7.1	15	—	6.92		
-005	G	7.8	15	—	4.24		
-006	G	7.4	15	—	4.65		
[illegible]24-002	D	7.4	15	—	3.05		
-003	E	7.5	15	—	4.74		
-004	E	7.5	15	—	4.80		
-005	F	7.7	15	—	4.33		
-006	F	7.5	15	—	4.32		
-007	G	7.4	15	—	4.40		
-009	E	7.3	15	—	3.79		
[illegible]5083-001	J	8.4	15	0.10	8.14		
-002	J	6.2	15	—	10.51		
[illegible]15084-001	H	6.8	15	—	4.97		
-002	H	6.9	15	—	18.53		
-003	H	7.1	15	—	8.70		
[illegible]15100-001	D	7.2	15	—	3.55		
-002	D	7.1	15	—	3.50		

*If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

SC 9/28/09
Analyst / Date

DMB 9/28/09
Reviewed by / Date

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	154965
Matrix:	Water	Received:	09/16/09
Units:	mg/L	Analyzed:	09/16/09 15:45
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled	ADEQ Flags
ASE-23B-9C1	SAMPLE	214922-003	ND	0.01	09/15/09 03:00	
PL-201A-9C1	SAMPLE	214922-004	ND	0.01	09/15/09 03:39	
ASE-65A-9C1	SAMPLE	214922-005	ND	0.01	09/15/09 04:27	
ASE-22B-9C1	SAMPLE	214922-006	0.03	0.01	09/15/09 05:12	
	BLANK	QC512263	ND	0.01		

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	214922	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ASE-23B-9C1	Batch#:	154965
MSS Lab ID:	214922-003	Sampled:	09/15/09 03:00
Matrix:	Water	Received:	09/16/09
Units:	mg/L	Analyzed:	09/16/09 15:45

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
LCS	QC512264		1.000	1.092	109	90-110			
MS	QC512265	<0.01000	1.000	0.8311	83 *	85-115			M2
MSD	QC512266		1.000	0.8260	83 *	85-115	1	20	M2

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 154965
Date Started: 16-SEP-2009
Batched by : Patrick Perin

Analysis : HEX CR
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
214922-003			CH2M Hill	Water	HEX CR	28-SEP-2009
214922-004			CH2M Hill	Water	HEX CR	28-SEP-2009
214922-005			CH2M Hill	Water	HEX CR	28-SEP-2009
214922-006			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-002			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-003			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-004			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-005			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-006			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-007			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-009			CH2M Hill	Water	HEX CR	28-SEP-2009
214940-002			Richard Brady And	Water	HEX CR	22-SEP-2009
214940-003			Richard Brady And	Water	HEX CR	22-SEP-2009
214940-004			Richard Brady And	Water	HEX CR	22-SEP-2009
QC512263	BLANK			Water	HEX CR	
QC512264	LCS			Water	HEX CR	
QC512265	MS	of 214922-003		Water	HEX CR	
QC512266	MSD	of 214922-003		Water	HEX CR	

Analysis:	**Hexavalent Chromium**	Analyst:	PAP
Method:	**EPA 7196A** / SMWW 3500 Cr-D	Prep & Analysis Date:	**9/16/2009**
Instrument:	Hach DR 2800	Batch Number:	**154965**
Wavelength:	540 nm (1 cm cell)	Matrix:	Water
SOP#:	hexcr_h2o_rv 7.doc		

INITIAL CALIBRATION

Calibration Date: 12/2/2008

mg/L	Absorbance	RF
0.010	0.010	1.000
0.025	0.025	1.000
0.050	0.048	0.960
0.100	0.098	0.980
0.250	0.243	0.972
0.750	0.701	0.935
1.250	1.156	0.925

Correlation Coefficient: 1.0000

Average Response: 0.967

%RSD: 3.1

Note: Sample calculations based on average response.

CALIBRATION VERIFICATION DATA

ICV / CCV Recovery Limits: 90 - 110%

	Dilution Factor	Absorbance	Raw Result (mg/L)	**REPORT (mg/L)**	Spike (mg/L)	Recovery	Reporting Limit (mg/L)
ICV/ **LCS**	1.00	1.056	1.09164	**1.0916**	1.000	**109%**	0.01
ICB/ **MB**	1.00	0.000	0.000	ND			0.01
CCV	1.00	1.056	1.09164	1.0916	1.000	109%	0.01
CCB	1.00	0.000	0.00000	ND			0.01
CCV	1.00	1.056	1.09164	1.0916	1.000	109%	0.01
CCB	1.00	0.000	0.00000	ND			0.01
CCV	1.00	1.040	1.07510	1.0751	1.000	108%	0.01
CCB	1.00	0.000	0.00000	ND			0.01

Reviewed by / Date: DM 9-22-09

Analysis: **Hexavalent Chromium**
Method: EPA 7196A / SMWW 3500 Cr-D

Prep & Analysis Date: **9/16/2009**
Batch Number: **154965**
Matrix: Water

RPD,%	Recovery,%	QC Limits
20	90 - 110	LCS/ BS/ BSD
20	85 - 115	MS/ MSD

SAMPLES & BATCH QC	Dilution Factor	Sample Absorbance	Color Blk Absorbance	Raw Result (mg/L)	REPORT (mg/L)	Reporting Limit (mg/L)	Spike Level	Recovery,%	RPD,%
MB	1.00	0.000		0.00000	ND	0.01			
LCS/BS	1.00	1.056		1.09164	**1.0916**	0.01	1.00	109	
214922-003	1.00	0.195	0.202	-0.00724	ND	0.01			
MS	1.00	1.006	0.202	0.83113	**0.8311**	0.01	1	83 *	
MSD	1.00	1.001	0.202	0.82597	**0.8260**	0.01	1	83 *	1
214922-004	1.00	0.001		0.00103	ND	0.01			
214922-005	1.00	0.002		0.00207	ND	0.01			
214922-006	1.00	0.034	0.001	0.03411	**0.0341**	0.01			
214924-002	1.00	0.002		0.00207	ND	0.01			
214924-003	1.00	0.004		0.00413	ND	0.01			
214924-004	1.00	0.006		0.00620	ND	0.01			
214924-005	1.00	0.006		0.00620	ND	0.01			
214924-006	1.00	0.003		0.00310	ND	0.01			
214924-007	1.00	0.002		0.00207	ND	0.01			
214924-009	1.00	0.004		0.00413	ND	0.01			
214940-002	1.00	0.012	0.01	0.00207	ND	0.01			
214940-003	1.00	0.000		0.00000	ND	0.01			
214940-004	1.00	0.025	0.023	0.00207	ND	0.01			

Reviewed by / Date: Dm 9-22-09

Hexavalent Chromium (Cr^{6+})
EPA 7196A / SMWW 3500Cr-D

Curtis & Tompkins, Ltd.

Lot Batch #: 154965
Matrix: Water
Analyst: PAD

Pipette #: 4033856
Cal Vol (mL): 0.0475
Mass (g): 0.0475

Benchbook#: **BK2913**
Page: **25**

Date: 9/16/09
Time: 15:45

Spike LIMS S#: 511388
Spike Std Conc (mg/L): 1000
Spike Vol Added (mL): 0.0475

H_2SO_4 Reagent ID: 8/11/09
S-diphenylcarbazide Reagent ID: 1905523 RECGA

Container ID		Sample pH	Diln Factor (Vi : Vf)	Vol (mL) Colored	Abs @ 540nm Sample/	Color Blk	Comments
B		<2	1X	47.5	0.000		
C					1.056		
-003	E				0.195	0.202	
003 MS					1.006	0.202	
003 MSD					1.001	0.202	
-004	E				0.001		
005	G				0.002		
006	F				0.034	0.001	
					1.056		
					0.000		
4-002	F				0.002		
-003	G				0.004		
-004					0.006		
-005					0.006		
-006					0.003		
-007	F				0.002		
~~-008~~	E				0.004		
~~-009~~					1.056		
~~-010~~					0.000		
~~-011~~							
40-002					0.012	0.010	AT⇒18:25
-003					0.000		
-004					0.025	0.023	
					1.040		
CB					0.000		

PAD 9/24/09

9/16/09
Analyst / Date

Continued from p.____
Continued on p.____

9/16/09
Reviewed by / Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214923
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091409B	214923-001
ASE-87A-9C1	214923-002
ASE-27A-9C1	214923-003
PL-202C-9C1	214923-004
PL-202N-9C1	214923-005
PL-517-9C1	214923-006
PL-519-9C1	214923-007
ASE-25C-9C1	214923-008
ASE-58A-9C1	214923-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 09/30/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214923**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 09/16/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 08/07/09 13:33; affected data was qualified with "b".

Low response was observed for iodomethane in the ICV analyzed 08/07/09 19:33; affected data was qualified with "b".

Low responses were observed for 2-hexanone and iodomethane in the CCV analyzed 09/24/09 08:35; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for carbon disulfide; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for bromomethane and iodomethane in the CCV analyzed 09/25/09 09:38; these analytes met minimum response criteria, and affected data was qualified with "b". High responses were observed for many analytes; affected data was qualified with "b".

High responses were observed for a number of analytes in the CCV analyzed 09/25/09 10:31; affected data was qualified with "b".

Low responses were observed for bromomethane and iodomethane in the CCV analyzed 09/25/09 15:29; these analytes met minimum response criteria. High responses were observed for many analytes.

High recovery was observed for n-butylbenzene in the LCS for batch 155248; this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene, 1,1-dichloroethane, and trans-1,2-dichloroethene in the MS/MSD of ASE-99A-9C1 (lab # 214851-009); the associated RPDs were within limits.

Low recoveries were observed for iodomethane in the BS/BSD for batch 155308;

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214923**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

Volatile Organics by GC/MS (EPA 8260B):
the associated RPD was within limits, and these low recoveries were not associated with any reported results. High recoveries were observed for many analytes; the associated RPDs were within limits, and these high recoveries were not associated with any reported results.

High recoveries were observed for n-butylbenzene and iodomethane in the LCS for batch 155309; these high recoveries were not associated with any reported results.

High recoveries were observed for many analytes in the MS/MSD of ASE-46B-9C1 (lab # 214922-002); the associated RPDs were within limits, and these high recoveries were not associated with any reported results.

High surrogate recovery was observed for bromofluorobenzene in ASE-58A-9C1 (lab # 214923-009).

No other analytical problems were encountered.

Metals (EPA 6010B) Water:
No analytical problems were encountered.

Metals (EPA 6010B) Filtrate:
No analytical problems were encountered.

Chain of Custody

21493

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. Weise - D. Foehr M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	TB	--	--	TB-091409B	9/14/9	0004				1	--	--	X														
2	ASE-87A	--	123	ASE-87A-9C1	9/14/9	0108				3	G	N	X														
3	ASE-27A	--	88	ASE-27A-9C1	9/14/9	0143				3	G	N	X														
4	PL-202C	--	122	PL-202C-9C1	9/14/9	0230				3	G	N	X														
5	PL-202N	--	178	PL-202N-9C1	9/14/9	2209				5	G	Y	X							X	X						
6	PL-517-9C1	--	--	PL-517-9C1	9/14/9	2219				5	G	Y	X							X	X						
7	PL-519-9C1	--	--	PL-519-9C1	9/14/9	2230				3	G	N	X														
8	ASE-25C	--	93	ASE-25C-9C1	9/14/9	2256				3	G	N	X														
9	ASE-58A	--	90	ASE-58A-9C1	9/14/9	2330				4	G	N	X	X													
10																											
11																											
12																											

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	H+A	09/15/09 17:00		Fed Ex	09/15/09 17:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214923 Date Received 9-16-9 Number of coolers 2
Client HONEYWELL Project QUARTERLY UST

Date Opened 9-16-9 By (print) S EVANS (sign) [signature]
Date Logged in [illegible] By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
   Shipping info MSTR# 8630 5639 5041

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 EA Name ____ Date 9-15-9
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.9, 5

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES NO
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ YES NO
10. Are samples in the appropriate containers for indicated tests? ____ YES NO
11. Are sample labels present, in good condition and complete? ____ YES NO
12. Do the sample labels agree with custody papers? ____ YES NO
13. Was sufficient amount of sample sent for tests requested? ____ YES NO
14. Are the samples appropriately preserved? ____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
16. Was the client contacted concerning this sample delivery? ____ YES NO
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS

TB= 1/1 VOA HAS BUBBLE

Laboratory Job Number 214923

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-58A-9C1	Batch#:	155075
Matrix:	Water	Sampled:	09/14/09
Units:	ug/L	Received:	09/16/09
Diln Fac:	1.000	Prepared:	09/18/09

Type: SAMPLE Analyzed: 09/25/09
Lab ID: 214923-009

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Type: BLANK Analyzed: 09/23/09
Lab ID: QC512696

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512697	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,471	99	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-99A-9C1	Batch#:	155075
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Prepared:	09/18/09
Diln Fac:	1.000	Analyzed:	09/23/09

Type: MS Lab ID: QC512698

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	<16.22	2,500	2,452	98	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Type: MSD Lab ID: QC512699

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,407	96	54-120	2	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512700	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,680	107	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626079 File : 264b079 Time : 22-SEP-2009 21:29
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42883	500.0	498.3	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67438	50.00	47.57	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169380626080 File : 264b080 Time : 22-SEP-2009 21:57
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57446	500.0	500.8	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	63359	50.00	44.70	mg/L	-11	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626096 File : 264b096 Time : 23-SEP-2009 05:25
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43307	500.0	503.2	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67479	50.00	47.60	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169380626097 File : 264b097 Time : 23-SEP-2009 05:53
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56996	250.0	248.4	mg/L	-1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	58264	50.00	41.10	mg/L	**-18**	15	c-

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365004 File : 268a004 Time : 25-SEP-2009 08:48
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42856	500.0	498.0	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	66438	50.00	46.87	mg/L	-6	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: JDG Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169386365005 File : 268a005 Time : 25-SEP-2009 09:16
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	51988	500.0	453.2	mg/L	-9	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	52421	50.00	36.98	mg/L	**-26**	15	c-

Analyst: JDG Date: 09/28/09 Reviewer: EAH Date: 09/29/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365021 File : 268a021 Time : 25-SEP-2009 17:20
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43179	500.0	501.7	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67373	50.00	47.53	mg/L	-5	15	

JDG 09/27/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 169386365022 File : 268a022 Time : 25-SEP-2009 17:48
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	59293	1000	1034	mg/L	3	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	64196	50.00	45.29	mg/L	-9	15	

JDG 09/27/09 : Separated from coeluting peak.

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264b001	X	PRIMER				09/21/09 07:46	1.0		
002	264b002	X	IB				09/21/09 08:14	1.0		
003	264b003	X	C8-C50				09/21/09 08:42	1.0	1	
004	264b004	X	DSL_250				09/21/09 09:10	1.0	2	
005	264b005	X	MO_500				09/21/09 09:38	1.0	3	
006	264b006	X	DSL_250				09/21/09 11:34	1.0	2	
007	264b007	X	BUNK_500				09/21/09 12:02	1.0	4	
008	264b008	X	MO_500				09/21/09 12:31	1.0	3	
009	264b009	X	IB				09/21/09 13:57	1.0		
010	264b010	CMARKER	CMARKER				09/21/09 14:25	1.0	1	
011	264b011	CCV	MO_500				09/21/09 14:53	1.0	3	
012	264b012	CCV	DSL_250				09/21/09 15:21	1.0	2	
013	264b013	CCV	BUNK_500				09/21/09 16:17	1.0	4	
014	264b014	BLANK	QC512806	S	Soil	155101	09/21/09 17:05	1.0		
015	264b015	LCS	QC512812	S	Soil	155101	09/21/09 17:33	1.0		
016	264b016	MSS	214977-001	S	Soil	155101	09/21/09 18:01	1.0		
017	264b017	MS	QC512808	S	Soil	155101	09/21/09 18:29	1.0		
018	264b018	MSD	QC512809	S	Soil	155101	09/21/09 18:57	1.0		
019	264b019	MSS	214978-001	S	Soil	155101	09/21/09 19:24	1.0		
020	264b020	MS	QC512810	S	Soil	155101	09/21/09 19:52	1.0		
021	264b021	MSD	QC512811	S	Soil	155101	09/21/09 20:20	1.0		
022	264b022	SAMPLE	214977-003	S	Soil	155101	09/21/09 20:48	5.0		
023	264b023	X	IB				09/21/09 21:16	1.0		
024	264b024	SAMPLE	214977-002	S	Soil	155101	09/21/09 21:44	1.0		
025	264b025	CCV	MO_500				09/21/09 22:11	1.0	3	
026	264b026	CCV	DSL_500				09/21/09 22:39	1.0	5	
027	264b027	CCV	BUNK_500				09/21/09 23:07	1.0	4	
028	264b028	X	CCV				09/21/09 23:35	1.0	3	
029	264b029	X	CCV				09/22/09 00:03	1.0	5	
030	264b030	X	CCV				09/22/09 00:31	1.0	4	
031	264b031	SAMPLE	214977-004	S	Soil	155101	09/22/09 00:58	1.0		
032	264b032	SAMPLE	214977-005	S	Soil	155101	09/22/09 01:26	5.0		
033	264b033	SAMPLE	214977-006	S	Soil	155101	09/22/09 01:54	1.0		
034	264b034	SAMPLE	214977-007	S	Soil	155101	09/22/09 02:22	5.0		
035	264b035	SAMPLE	214977-008	S	Soil	155101	09/22/09 02:49	1.0		
036	264b036	SAMPLE	214978-003	S	Soil	155101	09/22/09 03:17	1.0		
045	264b045	X	CCV				09/22/09 03:47	1.0	3	
046	264b046	X	CCV				09/22/09 04:15	1.0	6	
047	264b047	X	CCV				09/22/09 04:43	1.0	4	
048	264b048	SAMPLE	214978-006	S	Soil	155101	09/22/09 05:11	1.0		
049	264b049	SAMPLE	214978-007	S	Soil	155101	09/22/09 05:39	1.0		
050	264b050	CCV	MO_500				09/22/09 06:07	1.0	3	
051	264b051	CCV	DSL_250				09/22/09 06:35	1.0	2	
052	264b052	CCV	BUNK_500				09/22/09 07:02	1.0	4	
053	264b053	SAMPLE	214978-002	S	Soil	155101	09/22/09 08:01	1.0		
054	264b054	SAMPLE	214978-005	S	Soil	155101	09/22/09 08:29	1.0		
055	264b055	SAMPLE	214978-004	S	Soil	155101	09/22/09 08:56	1.0		
056	264b056	SAMPLE	214978-008	S	Soil	155101	09/22/09 09:24	1.0		
057	264b057	X	IB				09/22/09 10:20	1.0		
058	264b058	SAMPLE	214988-001		Water	155106	09/22/09 10:48	1.0		1:BUNKC:12-40=7000
059	264b059	SAMPLE	214988-002		Water	155106	09/22/09 11:15	1.0		1:BUNKC:12-40=7000
060	264b060	SAMPLE	214990-001		Soil	155134	09/22/09 12:24	3.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B Begun : 09/21/09 07:46
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
061	264b061	SAMPLE	214990-004		Soil	155134	09/22/09 12:57	3.0		
062	264b062	SAMPLE	214990-003		Soil	155134	09/22/09 13:26	3.0		
063	264b063	SAMPLE	214990-005		Soil	155134	09/22/09 13:53	3.0		
064	264b064	CCV	MO_500				09/22/09 14:21	1.0	3	
065	264b065	CCV	DSL_1000				09/22/09 14:49	1.0	6	
066	264b066	CCV	BUNK_500				09/22/09 15:17	1.0	4	
067	264b067	CMARKER	CMARKER				09/22/09 15:45	1.0	1	
068	264b068	MS	QC512808	S	Soil	155101	09/22/09 16:22	1.0		
069	264b069	MSD	QC512809	S	Soil	155101	09/22/09 16:50	1.0		
070	264b070	SAMPLE	215017-005		Water	155106	09/22/09 17:18	2.0		
071	264b071	MSS	214910-001		Soil	155134	09/22/09 17:46	1.0		
072	264b072	SAMPLE	214910-003		Soil	155134	09/22/09 18:14	1.0		
073	264b073	X	IB				09/22/09 18:42	1.0		
074	264b074	SAMPLE	215004-001	S	Water	155106	09/22/09 19:10	1.0		
075	264b075	SAMPLE	214959-010	S	Water	155106	09/22/09 19:38	1.0		
076	264b076	SAMPLE	214910-002		Soil	155134	09/22/09 20:06	1.0		
077	264b077	SAMPLE	214959-005	S	Water	155074	09/22/09 20:34	1.0		
078	264b078	SAMPLE	214959-006	S	Water	155074	09/22/09 21:01	1.0		
079	264b079	CCV	MO_500				09/22/09 21:29	1.0	3	
080	264b080	CCV	DSL_500				09/22/09 21:57	1.0	5	
081	264b081	CCV	BUNK_500				09/22/09 22:25	1.0	4	
082	264b082	X	CCV				09/22/09 22:53	1.0	3	
083	264b083	X	CCV				09/22/09 23:21	1.0	5	
084	264b084	X	CCV				09/22/09 23:50	1.0	4	
085	264b085	SAMPLE	214959-007	S	Water	155074	09/23/09 00:18	1.0		
086	264b086	SAMPLE	214959-008	S	Water	155074	09/23/09 00:46	1.0		
087	264b087	SAMPLE	214959-009	S	Water	155074	09/23/09 01:13	1.0		
088	264b088	BLANK	QC512696		Water	155075	09/23/09 01:41	1.0		
089	264b089	LCS	QC512697		Water	155075	09/23/09 02:09	1.0		
090	264b090	LCS	QC512700		Water	155075	09/23/09 02:37	1.0		
091	264b091	MSS	214851-009		Water	155075	09/23/09 03:05	1.0		
092	264b092	MS	QC512698		Water	155075	09/23/09 03:33	1.0		
093	264b093	MSD	QC512699		Water	155075	09/23/09 04:01	1.0		
094	264b094	SAMPLE	214903-001	S	Water	154973	09/23/09 04:29	1.0		
095	264b095	X	CMARKER				09/23/09 04:57	1.0	1	
096	264b096	CCV	MO_500				09/23/09 05:25	1.0	3	
097	264b097	CCV	DSL_250				09/23/09 05:53	1.0	2	
098	264b098	X	CCV				09/23/09 06:21	1.0	3	
099	264b099	X	CCV				09/23/09 06:49	1.0	2	
100	264b100	X	X			155220	09/24/09 11:01	10.0		

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 52.

JDG 09/22/09 : 37- 44 did not run.

TFB 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 53 through 66.

JDG 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 67 through 99.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

Standards used: 1=S11248 2=S12545 3=S12822 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169386365

Instrument : GC15B Begun : 09/25/09 07:25
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	268a001	X	PRIMER				09/25/09 07:25	1.0		
002	268a002	X	IB				09/25/09 07:53	1.0		
003	268a003	X	CMARKER				09/25/09 08:20	1.0	1	
004	268a004	CCV	MO_500				09/25/09 08:48	1.0	2	
005	268a005	CCV	DSL_500				09/25/09 09:16	1.0	3	
006	268a006	X	QC512558	S	Water	155038	09/25/09 09:44	1.0		
007	268a007	X	QC512559	S	Water	155038	09/25/09 10:12	1.0		
008	268a008	X	QC512560	S	Water	155038	09/25/09 10:40	1.0		
009	268a009	X	QC512561	S	Water	155038	09/25/09 11:07	1.0		
010	268a010	X	QC512562	S	Water	155038	09/25/09 11:35	1.0		
011	268a011	SAMPLE	214922-004		Water	155075	09/25/09 12:40	1.0		
012	268a012	SAMPLE	214922-005		Water	155075	09/25/09 13:08	1.0		
013	268a013	SAMPLE	214923-009		Water	155075	09/25/09 13:36	1.0		
014	268a014	SAMPLE	214924-002		Water	155075	09/25/09 14:04	1.0		
015	268a015	SAMPLE	214925-007		Water	155075	09/25/09 14:31	1.0		
016	268a016	SAMPLE	214925-009		Water	155075	09/25/09 14:59	1.0		
017	268a017	SAMPLE	214925-010		Water	155075	09/25/09 15:27	1.0		
018	268a018	SAMPLE	214980-001		Soil	155270	09/25/09 15:55	1.0		
019	268a019	SAMPLE	214980-004		Soil	155270	09/25/09 16:23	1.0		
020	268a020	SAMPLE	214980-005		Soil	155270	09/25/09 16:52	1.0		
021	268a021	CCV	MO_500				09/25/09 17:20	1.0	2	
022	268a022	CCV	DSL_1000				09/25/09 17:48	1.0	4	
023	268a023	X	CCV				09/25/09 18:16	1.0	2	
024	268a024	X	CCV				09/25/09 18:44	1.0	4	
025	268a025	BLANK	QC513372		Water	155238	09/25/09 19:12	1.0		
026	268a026	SAMPLE	215034-001		Water	155238	09/25/09 19:40	1.0		
027	268a027	SAMPLE	215034-002		Water	155238	09/25/09 20:07	1.0		
028	268a028	SAMPLE	215034-003		Water	155238	09/25/09 20:35	1.0		
029	268a029	SAMPLE	215034-004		Water	155238	09/25/09 21:03	1.0		
030	268a030	SAMPLE	215034-005		Water	155238	09/25/09 21:31	1.0		
031	268a031	SAMPLE	215034-006		Water	155238	09/25/09 21:58	1.0		
032	268a032	SAMPLE	215034-007		Water	155238	09/25/09 22:26	1.0		
033	268a033	SAMPLE	215034-008		Water	155238	09/25/09 22:54	1.0		
034	268a034	SAMPLE	215118-001		Water	155238	09/25/09 23:22	1.0		
035	268a035	X	CMARKER				09/25/09 23:49	1.0	5	
036	268a036	CCV	DSL_500				09/26/09 00:16	1.0	3	
037	268a037	CCV	MO_500				09/26/09 00:43	1.0	2	
038	268a038	X	CCV				09/26/09 01:11	1.0	3	
039	268a039	X	CCV				09/26/09 01:39	1.0	2	

JDG 09/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S11248 2=S12822 3=S12546 4=S12547 5=S11825

SAMPLE PREPARATION SUMMARY

Batch # : 155075 Analysis : TEH
Started By : SFL Prep Date : 18-SEP-2009 16:45 Finished By : SFL
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12972 Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214851-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-009		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
214851-010		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-011		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-012		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-013		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-014		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-015		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-016		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-017		Water	500	2.5	1	0.005	7	.5				TEHM	
214881-001		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214923-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214924-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-010		Water	500	2.5	1	0.005	7	.5				TEHM	
QC512696	BLANK	Water	500	2.5	1	0.005		.5					
QC512697	LCS	Water	500	2.5	1	0.005		.5	.5				
QC512698	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC512699	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC512700	LCS	Water	500	2.5	1	0.005		.5		.5			

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

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LIMS Batch No: 155075
LIMS Analysis: TEH
Date Extracted: 9/18/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☐ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214851-003	D	500	7	2.5		
5	E					
9	L					MSS
10	D					
11						
12						
13						
14						
15						
16						
17						
214881-001						
214922-004	I					
05						
214923-009	D					
214924-002	H					
214925-007	D					
9						
10						
MB BLC9/20/09						
LCS 97						
MS 98	K		7			
MSD 99						
LCS 100						MO *

SFL 9/20/09

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129348	SFL 9/18/09
0.5/0.5X mL of TEH_SP was added to all spikes	S129728/S122900	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F0093334	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1645	
Extraction End Time:	12:25	SDD 9/19/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SFL 9/20/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49001904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/18/09

Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

9/21/09

Reviewed by **Date**

Laboratory Job Number 214923

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091409B	Batch#:	155248
Lab ID:	214923-001	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091409B	Batch#:	155248
Lab ID:	214923-001	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	111	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-87A-9C1	Batch#:	155248
Lab ID:	214923-002	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-87A-9C1	Batch#:	155248
Lab ID:	214923-002	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-27A-9C1	Batch#:	155248
Lab ID:	214923-003	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.0	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.7	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.1	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-27A-9C1	Batch#:	155248
Lab ID:	214923-003	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-202C-9C1	Batch#:	155248
Lab ID:	214923-004	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	0.7	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-202C-9C1	Batch#:	155248
Lab ID:	214923-004	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-202N-9C1	Batch#:	155248
Lab ID:	214923-005	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D2
Chloromethane	ND	2.0	D2
Vinyl Chloride	ND	1.0	D2
Bromomethane	ND	2.0	D2
Chloroethane	ND	2.0	D2
Trichlorofluoromethane	ND	2.0	D2
Iodomethane	ND	20	D2 V9
Acetone	ND	20	D2
1,1-Dichloroethene	16	1.0	D2
Methylene Chloride	ND	20	D2
Carbon Disulfide	ND	1.0	D2 V1
MTBE	ND	1.0	D2
trans-1,2-Dichloroethene	ND	1.0	D2
Vinyl Acetate	ND	20	D2
1,1-Dichloroethane	4.4	1.0	D2
2-Butanone	ND	20	D2
cis-1,2-Dichloroethene	35	1.0	D2
2,2-Dichloropropane	ND	1.0	D2
Chloroform	1.0	1.0	D2
Bromochloromethane	ND	1.0	D2
1,1,1-Trichloroethane	ND	1.0	D2
1,1-Dichloropropene	ND	1.0	D2
Carbon Tetrachloride	ND	1.0	D2
1,2-Dichloroethane	ND	1.0	D2
Benzene	ND	1.0	D2
Trichloroethene	130	1.0	D2
1,2-Dichloropropane	ND	1.0	D2
Bromodichloromethane	ND	1.0	D2
Dibromomethane	ND	1.0	D2
4-Methyl-2-Pentanone	ND	20	D2
cis-1,3-Dichloropropene	ND	1.0	D2
Toluene	ND	1.0	D2
trans-1,3-Dichloropropene	ND	1.0	D2
1,1,2-Trichloroethane	ND	1.0	D2
2-Hexanone	ND	20	D2 V9
1,3-Dichloropropane	ND	1.0	D2
Tetrachloroethene	ND	1.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-202N-9C1	Batch#:	155248
Lab ID:	214923-005	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D2
1,2-Dibromoethane	ND	1.0	D2
Chlorobenzene	ND	1.0	D2
1,1,1,2-Tetrachloroethane	ND	1.0	D2
Ethylbenzene	ND	1.0	D2
m,p-Xylenes	ND	1.0	D2
o-Xylene	ND	1.0	D2
Styrene	ND	1.0	D2
Bromoform	ND	2.0	D2
Isopropylbenzene	ND	1.0	D2
1,1,2,2-Tetrachloroethane	ND	1.0	D2
1,2,3-Trichloropropane	ND	1.0	D2
Propylbenzene	ND	1.0	D2
Bromobenzene	ND	1.0	D2
1,3,5-Trimethylbenzene	ND	1.0	D2
2-Chlorotoluene	ND	1.0	D2
4-Chlorotoluene	ND	1.0	D2
tert-Butylbenzene	ND	1.0	D2
1,2,4-Trimethylbenzene	ND	1.0	D2
sec-Butylbenzene	ND	1.0	D2
para-Isopropyl Toluene	ND	1.0	D2
1,3-Dichlorobenzene	ND	1.0	D2
1,4-Dichlorobenzene	ND	1.0	D2
n-Butylbenzene	ND	1.0	D2 L1
1,2-Dichlorobenzene	ND	1.0	D2
1,2-Dibromo-3-Chloropropane	ND	4.0	D2
1,2,4-Trichlorobenzene	ND	1.0	D2
Hexachlorobutadiene	ND	4.0	D2
Naphthalene	ND	4.0	D2
1,2,3-Trichlorobenzene	ND	1.0	D2
Xylene (total)	ND	1.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	109	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	112	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-517-9C1	Units:	ug/L
Lab ID:	214923-006	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	1.6	1.0	1.000	155248	09/24/09	
Chloromethane	ND	1.0	1.000	155248	09/24/09	
Vinyl Chloride	ND	0.5	1.000	155248	09/24/09	
Bromomethane	ND	1.0	1.000	155248	09/24/09	
Chloroethane	ND	1.0	1.000	155248	09/24/09	
Trichlorofluoromethane	ND	1.0	1.000	155248	09/24/09	
Iodomethane	ND	10	1.000	155248	09/24/09	V9
Acetone	ND	10	1.000	155248	09/24/09	
1,1-Dichloroethene	23	0.5	1.000	155248	09/24/09	
Methylene Chloride	ND	10	1.000	155248	09/24/09	
Carbon Disulfide	ND	0.5	1.000	155248	09/24/09	V1
MTBE	ND	0.5	1.000	155248	09/24/09	
trans-1,2-Dichloroethene	ND	0.5	1.000	155248	09/24/09	
Vinyl Acetate	ND	10	1.000	155248	09/24/09	
1,1-Dichloroethane	5.3	0.5	1.000	155248	09/24/09	
2-Butanone	ND	10	1.000	155248	09/24/09	
cis-1,2-Dichloroethene	42	0.5	1.000	155248	09/24/09	
2,2-Dichloropropane	ND	0.5	1.000	155248	09/24/09	
Chloroform	1.0	0.5	1.000	155248	09/24/09	
Bromochloromethane	ND	0.5	1.000	155248	09/24/09	
1,1,1-Trichloroethane	ND	0.5	1.000	155248	09/24/09	
1,1-Dichloropropene	ND	0.5	1.000	155248	09/24/09	
Carbon Tetrachloride	ND	0.5	1.000	155248	09/24/09	
1,2-Dichloroethane	ND	0.5	1.000	155248	09/24/09	
Benzene	ND	0.5	1.000	155248	09/24/09	
Trichloroethene	120	2.5	5.000	155309	09/25/09	D1
1,2-Dichloropropane	ND	0.5	1.000	155248	09/24/09	
Bromodichloromethane	ND	0.5	1.000	155248	09/24/09	
Dibromomethane	ND	0.5	1.000	155248	09/24/09	
4-Methyl-2-Pentanone	ND	10	1.000	155248	09/24/09	
cis-1,3-Dichloropropene	ND	0.5	1.000	155248	09/24/09	
Toluene	ND	0.5	1.000	155248	09/24/09	
trans-1,3-Dichloropropene	ND	0.5	1.000	155248	09/24/09	
1,1,2-Trichloroethane	ND	0.5	1.000	155248	09/24/09	
2-Hexanone	ND	10	1.000	155248	09/24/09	V9
1,3-Dichloropropane	ND	0.5	1.000	155248	09/24/09	
Tetrachloroethene	0.5	0.5	1.000	155248	09/24/09	
Dibromochloromethane	ND	0.5	1.000	155248	09/24/09	
1,2-Dibromoethane	ND	0.5	1.000	155248	09/24/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-517-9C1	Units:	ug/L
Lab ID:	214923-006	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Chlorobenzene	ND	0.5	1.000	155248	09/24/09	
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	155248	09/24/09	
Ethylbenzene	ND	0.5	1.000	155248	09/24/09	
m,p-Xylenes	ND	0.5	1.000	155248	09/24/09	
o-Xylene	ND	0.5	1.000	155248	09/24/09	
Styrene	ND	0.5	1.000	155248	09/24/09	
Bromoform	ND	1.0	1.000	155248	09/24/09	
Isopropylbenzene	ND	0.5	1.000	155248	09/24/09	
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	155248	09/24/09	
1,2,3-Trichloropropane	ND	0.5	1.000	155248	09/24/09	
Propylbenzene	ND	0.5	1.000	155248	09/24/09	
Bromobenzene	ND	0.5	1.000	155248	09/24/09	
1,3,5-Trimethylbenzene	ND	0.5	1.000	155248	09/24/09	
2-Chlorotoluene	ND	0.5	1.000	155248	09/24/09	
4-Chlorotoluene	ND	0.5	1.000	155248	09/24/09	
tert-Butylbenzene	ND	0.5	1.000	155248	09/24/09	
1,2,4-Trimethylbenzene	ND	0.5	1.000	155248	09/24/09	
sec-Butylbenzene	ND	0.5	1.000	155248	09/24/09	
para-Isopropyl Toluene	ND	0.5	1.000	155248	09/24/09	
1,3-Dichlorobenzene	ND	0.5	1.000	155248	09/24/09	
1,4-Dichlorobenzene	ND	0.5	1.000	155248	09/24/09	
n-Butylbenzene	ND	0.5	1.000	155248	09/24/09	L1
1,2-Dichlorobenzene	ND	0.5	1.000	155248	09/24/09	
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	155248	09/24/09	
1,2,4-Trichlorobenzene	ND	0.5	1.000	155248	09/24/09	
Hexachlorobutadiene	ND	2.0	1.000	155248	09/24/09	
Naphthalene	ND	2.0	1.000	155248	09/24/09	
1,2,3-Trichlorobenzene	ND	0.5	1.000	155248	09/24/09	
Xylene (total)	ND	0.5	1.000	155248	09/24/09	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	110	77-120	1.000	155248	09/24/09	
Dibromofluoromethane	113	77-120	5.000	155309	09/25/09	
1,2-Dichloroethane-d4	100	70-127	1.000	155248	09/24/09	
1,2-Dichloroethane-d4	105	70-127	5.000	155309	09/25/09	
Toluene-d8	105	83-125	1.000	155248	09/24/09	
Toluene-d8	106	83-125	5.000	155309	09/25/09	
Bromofluorobenzene	117	78-120	1.000	155248	09/24/09	
Bromofluorobenzene	117	78-120	5.000	155309	09/25/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-519-9C1	Batch#:	155248
Lab ID:	214923-007	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	73	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-519-9C1	Batch#:	155248
Lab ID:	214923-007	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-25C-9C1	Batch#:	155248
Lab ID:	214923-008	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	5.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	1.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	11	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	12	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	3.8	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-25C-9C1	Batch#:	155248
Lab ID:	214923-008	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	0.5	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-58A-9C1	Diln Fac:	1.000
Lab ID:	214923-009	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	155248	09/24/09	
Chloromethane	ND	1.0	155248	09/24/09	
Vinyl Chloride	4.1	0.5	155248	09/24/09	
Bromomethane	ND	1.0	155248	09/24/09	
Chloroethane	1.2	1.0	155248	09/24/09	
Trichlorofluoromethane	ND	1.0	155248	09/24/09	
Iodomethane	ND	10	155248	09/24/09	V9
Acetone	ND	10	155248	09/24/09	
1,1-Dichloroethene	ND	0.5	155248	09/24/09	
Methylene Chloride	ND	10	155248	09/24/09	
Carbon Disulfide	ND	0.5	155248	09/24/09	V1
MTBE	15	0.5	155248	09/24/09	
trans-1,2-Dichloroethene	ND	0.5	155248	09/24/09	
Vinyl Acetate	ND	10	155248	09/24/09	
1,1-Dichloroethane	21	0.5	155248	09/24/09	
2-Butanone	ND	10	155248	09/24/09	
cis-1,2-Dichloroethene	2.0	0.5	155248	09/24/09	
2,2-Dichloropropane	ND	0.5	155248	09/24/09	
Chloroform	ND	0.5	155248	09/24/09	
Bromochloromethane	ND	0.5	155248	09/24/09	
1,1,1-Trichloroethane	ND	0.5	155248	09/24/09	
1,1-Dichloropropene	ND	0.5	155248	09/24/09	
Carbon Tetrachloride	ND	0.5	155248	09/24/09	
1,2-Dichloroethane	ND	0.5	155248	09/24/09	
Benzene	9.5	0.5	155248	09/24/09	
Trichloroethene	1.0	0.5	155248	09/24/09	
1,2-Dichloropropane	ND	0.5	155248	09/24/09	
Bromodichloromethane	ND	0.5	155248	09/24/09	
Dibromomethane	ND	0.5	155248	09/24/09	
4-Methyl-2-Pentanone	ND	10	155248	09/24/09	
cis-1,3-Dichloropropene	ND	0.5	155248	09/24/09	
Toluene	ND	0.5	155248	09/24/09	
trans-1,3-Dichloropropene	ND	0.5	155248	09/24/09	
1,1,2-Trichloroethane	ND	0.5	155248	09/24/09	
2-Hexanone	ND	10	155248	09/24/09	V9
1,3-Dichloropropane	ND	0.5	155248	09/24/09	
Tetrachloroethene	ND	0.5	155248	09/24/09	
Dibromochloromethane	ND	0.5	155248	09/24/09	
1,2-Dibromoethane	ND	0.5	155248	09/24/09	
Chlorobenzene	ND	0.5	155248	09/24/09	
1,1,1,2-Tetrachloroethane	ND	0.5	155248	09/24/09	
Ethylbenzene	ND	0.5	155248	09/24/09	
m,p-Xylenes	ND	0.5	155248	09/24/09	
o-Xylene	ND	0.5	155248	09/24/09	
Styrene	ND	0.5	155248	09/24/09	
Bromoform	ND	1.0	155248	09/24/09	
Isopropylbenzene	2.4	0.5	155308	09/25/09	
1,1,2,2-Tetrachloroethane	ND	0.5	155248	09/24/09	
1,2,3-Trichloropropane	ND	0.5	155248	09/24/09	
Propylbenzene	ND	0.5	155248	09/24/09	
Bromobenzene	ND	0.5	155248	09/24/09	
1,3,5-Trimethylbenzene	ND	0.5	155248	09/24/09	
2-Chlorotoluene	ND	0.5	155248	09/24/09	
4-Chlorotoluene	ND	0.5	155248	09/24/09	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-58A-9C1	Diln Fac:	1.000
Lab ID:	214923-009	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
tert-Butylbenzene	ND	0.5	155248	09/24/09	
1,2,4-Trimethylbenzene	ND	0.5	155248	09/24/09	
sec-Butylbenzene	1.5	0.5	155308	09/25/09	
para-Isopropyl Toluene	ND	0.5	155248	09/24/09	
1,3-Dichlorobenzene	ND	0.5	155248	09/24/09	
1,4-Dichlorobenzene	ND	0.5	155248	09/24/09	
n-Butylbenzene	ND	0.5	155248	09/24/09	L1
1,2-Dichlorobenzene	ND	0.5	155248	09/24/09	
1,2-Dibromo-3-Chloropropane	ND	2.0	155248	09/24/09	
1,2,4-Trichlorobenzene	ND	0.5	155248	09/24/09	
Hexachlorobutadiene	ND	2.0	155248	09/24/09	
Naphthalene	ND	2.0	155248	09/24/09	
1,2,3-Trichlorobenzene	ND	0.5	155248	09/24/09	
Xylene (total)	ND	0.5	155248	09/24/09	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	111	77-120	155248	09/24/09	
Dibromofluoromethane	100	77-120	155308	09/25/09	
1,2-Dichloroethane-d4	100	70-127	155248	09/24/09	
1,2-Dichloroethane-d4	114	70-127	155308	09/25/09	
Toluene-d8	105	83-125	155248	09/24/09	
Toluene-d8	102	83-125	155308	09/25/09	
Bromofluorobenzene	123 *	78-120	155248	09/24/09	S1
Bromofluorobenzene	106	78-120	155308	09/25/09	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513420	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.90	112	56-140	
Chloromethane	25.00	24.65	99	46-142	
Vinyl Chloride	25.00	25.76	103	49-136	
Bromomethane	25.00	27.88	112	42-154	
Chloroethane	25.00	27.04	108	51-133	
Trichlorofluoromethane	25.00	24.48	98	63-135	
Iodomethane	25.00	30.02 b	120	70-130	V9
Acetone	25.00	22.66	91	48-130	
1,1-Dichloroethene	25.00	26.57	106	68-133	
Methylene Chloride	25.00	26.76	107	71-120	
Carbon Disulfide	25.00	25.62 b	102	56-120	V3
MTBE	25.00	23.82	95	58-120	
trans-1,2-Dichloroethene	25.00	28.91	116	80-120	
Vinyl Acetate	25.00	22.15	89	63-124	
1,1-Dichloroethane	25.00	27.22	109	77-120	
2-Butanone	25.00	23.31	93	57-120	
cis-1,2-Dichloroethene	25.00	27.08	108	75-120	
2,2-Dichloropropane	25.00	27.29	109	72-128	
Chloroform	25.00	25.35	101	78-120	
Bromochloromethane	25.00	27.92	112	78-120	
1,1,1-Trichloroethane	25.00	26.20	105	78-120	
1,1-Dichloropropene	25.00	24.75	99	75-120	
Carbon Tetrachloride	25.00	23.61	94	80-120	
1,2-Dichloroethane	25.00	23.01	92	74-120	
Benzene	25.00	26.25	105	77-120	
Trichloroethene	25.00	25.90	104	78-122	
1,2-Dichloropropane	25.00	25.50	102	76-120	
Bromodichloromethane	25.00	25.14	101	78-120	
Dibromomethane	25.00	24.64	99	77-120	
4-Methyl-2-Pentanone	25.00	20.47	82	65-120	
cis-1,3-Dichloropropene	25.00	27.34	109	76-120	
Toluene	25.00	24.90	100	73-120	
trans-1,3-Dichloropropene	25.00	23.07	92	72-120	
1,1,2-Trichloroethane	25.00	25.30	101	76-120	
2-Hexanone	25.00	19.29 b	77	57-121	V9
1,3-Dichloropropane	25.00	25.29	101	75-120	
Tetrachloroethene	25.00	23.12	92	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513420	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.44	98	76-120	
1,2-Dibromoethane	25.00	24.58	98	77-120	
Chlorobenzene	25.00	24.69	99	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.12	96	77-120	
Ethylbenzene	25.00	25.14	101	78-120	
m,p-Xylenes	50.00	49.64	99	77-120	
o-Xylene	25.00	23.99	96	77-120	
Styrene	25.00	24.94	100	77-120	
Bromoform	25.00	22.35	89	74-121	
Isopropylbenzene	25.00	23.32	93	71-120	
1,1,2,2-Tetrachloroethane	25.00	26.04	104	73-120	
1,2,3-Trichloropropane	25.00	28.42	114	72-120	
Propylbenzene	25.00	24.65	99	76-120	
Bromobenzene	25.00	26.71	107	75-120	
1,3,5-Trimethylbenzene	25.00	28.11	112	77-120	
2-Chlorotoluene	25.00	27.39	110	76-120	
4-Chlorotoluene	25.00	25.84	103	78-120	
tert-Butylbenzene	25.00	21.99	88	76-120	
1,2,4-Trimethylbenzene	25.00	28.73	115	77-120	
sec-Butylbenzene	25.00	22.42	90	80-120	
para-Isopropyl Toluene	25.00	24.59	98	76-120	
1,3-Dichlorobenzene	25.00	25.11	100	75-120	
1,4-Dichlorobenzene	25.00	24.58	98	77-120	
n-Butylbenzene	25.00	34.80	139 *	76-120	L1
1,2-Dichlorobenzene	25.00	25.46	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.94	100	65-120	
1,2,4-Trichlorobenzene	25.00	25.60	102	73-121	
Hexachlorobutadiene	25.00	22.47	90	73-123	
Naphthalene	25.00	28.42	114	62-121	
1,2,3-Trichlorobenzene	25.00	26.71	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513421	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513421	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513430

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	30.19	121	56-140	
Chloromethane	<0.2000	25.00	29.34	117	46-142	
Vinyl Chloride	<0.1000	25.00	29.85	119	49-136	
Bromomethane	<0.2000	25.00	28.55	114	42-154	
Chloroethane	<0.2000	25.00	29.56	118	51-133	
Trichlorofluoromethane	<0.2000	25.00	27.84	111	63-135	
Iodomethane	<2.000	25.00	33.08 b	132	60-140	V9
Acetone	<1.000	25.00	25.74	103	48-130	
1,1-Dichloroethene	<0.1000	25.00	29.58	118	68-133	
Methylene Chloride	0.1268	25.00	28.77	115	71-120	
Carbon Disulfide	<0.1000	25.00	28.46 b	114	56-120	V3
MTBE	<0.1000	25.00	25.32	101	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	31.31	125 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.80	83	63-124	
1,1-Dichloroethane	<0.1000	25.00	30.44	122 *	77-120	M1
2-Butanone	<2.000	25.00	25.06	100	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	28.82	115	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.15	109	72-128	
Chloroform	0.1233	25.00	27.99	111	78-120	
Bromochloromethane	<0.1000	25.00	28.59	114	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	30.08	120	78-120	
1,1-Dichloropropene	<0.1000	25.00	27.63	111	75-120	
Carbon Tetrachloride	<0.1000	25.00	26.34	105	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.21	101	74-120	
Benzene	<0.1000	25.00	28.12	112	77-120	
Trichloroethene	<0.1000	25.00	27.35	109	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.93	108	76-120	
Bromodichloromethane	<0.1000	25.00	26.73	107	78-120	
Dibromomethane	<0.1000	25.00	25.58	102	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.70	87	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	27.77	111	76-120	
Toluene	<0.1000	25.00	25.87	103	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.03	92	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.34	101	76-120	
2-Hexanone	<2.000	25.00	19.71 b	79	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.99	104	75-120	
Tetrachloroethene	<0.1316	25.00	23.79	95	77-120	
Dibromochloromethane	<0.1000	25.00	24.46	98	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.41	98	77-120	
Chlorobenzene	<0.1000	25.00	25.18	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.36	97	77-120	
Ethylbenzene	<0.1000	25.00	26.59	106	78-120	
m,p-Xylenes	<0.1594	50.00	53.10	106	77-120	
o-Xylene	<0.1000	25.00	25.49	102	77-120	
Styrene	<0.1000	25.00	24.89	100	77-120	
Bromoform	<0.2000	25.00	22.00	88	74-121	
Isopropylbenzene	<0.1000	25.00	24.21	97	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.25	101	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	27.45	110	72-120	
Propylbenzene	<0.1000	25.00	25.89	104	76-120	
Bromobenzene	<0.1000	25.00	25.68	103	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	29.12	116	77-120	
2-Chlorotoluene	<0.1000	25.00	28.40	114	76-120	
4-Chlorotoluene	<0.1000	25.00	26.65	107	78-120	
tert-Butylbenzene	<0.1000	25.00	23.05	92	76-120	
1,2,4-Trimethylbenzene	0.1251	25.00	30.14	120	77-120	
sec-Butylbenzene	<0.1029	25.00	23.14	93	80-120	
para-Isopropyl Toluene	<0.1000	25.00	25.22	101	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.26	101	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.55	98	77-120	
n-Butylbenzene	<0.1285	25.00	37.31	149 *	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.44	102	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.11	96	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	25.51	102	73-121	
Hexachlorobutadiene	<0.4000	25.00	22.42	90	73-123	
Naphthalene	<0.4000	25.00	28.28	113	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	26.88	108	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	106	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513431

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	28.23	113	56-140	7	24	
Chloromethane	25.00	27.52	110	46-142	6	24	
Vinyl Chloride	25.00	28.07	112	49-136	6	24	
Bromomethane	25.00	31.18	125	42-154	9	24	
Chloroethane	25.00	28.19	113	51-133	5	25	
Trichlorofluoromethane	25.00	25.54	102	63-135	9	20	
Iodomethane	25.00	33.61 b	134	60-140	2	30	V9
Acetone	25.00	24.48	98	48-130	5	41	
1,1-Dichloroethene	25.00	27.63	111	68-133	7	20	
Methylene Chloride	25.00	27.19	108	71-120	6	20	
Carbon Disulfide	25.00	26.40 b	106	56-120	8	20	V3
MTBE	25.00	24.57	98	58-120	3	21	
trans-1,2-Dichloroethene	25.00	29.19	117	80-120	7	24	
Vinyl Acetate	25.00	19.55	78	63-124	6	24	
1,1-Dichloroethane	25.00	28.00	112	77-120	8	20	
2-Butanone	25.00	23.56	94	57-120	6	32	
cis-1,2-Dichloroethene	25.00	27.25	109	75-120	6	20	
2,2-Dichloropropane	25.00	24.62	98	72-128	10	24	
Chloroform	25.00	25.79	103	78-120	8	20	
Bromochloromethane	25.00	27.28	109	78-120	5	20	
1,1,1-Trichloroethane	25.00	27.46	110	78-120	9	20	
1,1-Dichloropropene	25.00	25.65	103	75-120	7	21	
Carbon Tetrachloride	25.00	24.43	98	80-120	8	21	
1,2-Dichloroethane	25.00	23.57	94	74-120	7	20	
Benzene	25.00	26.30	105	77-120	7	20	
Trichloroethene	25.00	26.02	104	78-122	5	20	
1,2-Dichloropropane	25.00	25.38	102	76-120	6	20	
Bromodichloromethane	25.00	25.35	101	78-120	5	20	
Dibromomethane	25.00	24.74	99	77-120	3	20	
4-Methyl-2-Pentanone	25.00	20.39	82	65-120	6	22	
cis-1,3-Dichloropropene	25.00	26.41	106	76-120	5	20	
Toluene	25.00	24.24	97	73-120	6	20	
trans-1,3-Dichloropropene	25.00	22.25	89	72-120	3	20	
1,1,2-Trichloroethane	25.00	24.77	99	76-120	2	20	
2-Hexanone	25.00	18.31 b	73	57-121	7	25	V9
1,3-Dichloropropane	25.00	24.95	100	75-120	4	20	
Tetrachloroethene	25.00	22.55	90	77-120	5	20	
Dibromochloromethane	25.00	23.66	95	76-120	3	20	
1,2-Dibromoethane	25.00	23.81	95	77-120	2	20	
Chlorobenzene	25.00	23.82	95	78-120	6	20	
1,1,1,2-Tetrachloroethane	25.00	23.32	93	77-120	4	20	
Ethylbenzene	25.00	24.76	99	78-120	7	26	
m,p-Xylenes	50.00	49.00	98	77-120	8	20	
o-Xylene	25.00	23.70	95	77-120	7	20	
Styrene	25.00	23.24	93	77-120	7	20	
Bromoform	25.00	21.52	86	74-121	2	21	
Isopropylbenzene	25.00	22.72	91	71-120	6	20	
1,1,2,2-Tetrachloroethane	25.00	24.71	99	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC		Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	27.41	110		72-120	0	20	
Propylbenzene	25.00	24.18	97		76-120	7	20	
Bromobenzene	25.00	24.92	100		75-120	3	20	
1,3,5-Trimethylbenzene	25.00	27.45	110		77-120	6	20	
2-Chlorotoluene	25.00	26.62	106		76-120	6	20	
4-Chlorotoluene	25.00	25.04	100		78-120	6	20	
tert-Butylbenzene	25.00	21.44	86		76-120	7	21	
1,2,4-Trimethylbenzene	25.00	28.48	113		77-120	6	20	
sec-Butylbenzene	25.00	21.58	86		80-120	7	21	
para-Isopropyl Toluene	25.00	23.88	96		76-120	5	20	
1,3-Dichlorobenzene	25.00	24.13	97		75-120	5	20	
1,4-Dichlorobenzene	25.00	23.53	94		77-120	4	23	
n-Butylbenzene	25.00	34.08	136	*	76-120	9	21	M1
1,2-Dichlorobenzene	25.00	24.43	98		76-120	4	20	
1,2-Dibromo-3-Chloropropane	25.00	23.81	95		65-120	1	22	
1,2,4-Trichlorobenzene	25.00	25.02	100		73-121	2	20	
Hexachlorobutadiene	25.00	20.79	83		73-123	8	25	
Naphthalene	25.00	28.15	113		62-121	0	32	
1,2,3-Trichlorobenzene	25.00	26.54	106		66-123	1	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	107	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513637	Batch#:	155308
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	L1 V1
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	L1 V1
cis-1,3-Dichloropropene	ND	0.5	L1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	L1 V1
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513637	Batch#:	155308
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	L1
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	L1
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	L1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	120	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155308
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: BS Lab ID: QC513638

Analyte	Spiked	Result		%REC		Limits	ADEQ Flags
Freon 12	20.00	21.03		105		56-140	
Chloromethane	20.00	22.10		111		46-142	
Vinyl Chloride	20.00	20.98		105		49-136	
Bromomethane	20.00	15.54	b	78		42-154	V9
Chloroethane	20.00	20.27		101		51-133	
Trichlorofluoromethane	20.00	20.28		101		63-135	
Iodomethane	20.00	13.13	b	66	*	70-130	L2 V9
Acetone	20.00	25.22		126		48-130	
1,1-Dichloroethene	20.00	21.15		106		68-133	
Methylene Chloride	20.00	18.10		91		71-120	
Carbon Disulfide	20.00	20.08		100		56-120	
MTBE	20.00	20.97		105		58-120	
trans-1,2-Dichloroethene	20.00	21.21		106		80-120	
Vinyl Acetate	20.00	43.37	b	217	*	63-124	L1 R2 V3
1,1-Dichloroethane	20.00	22.05		110		77-120	
2-Butanone	20.00	28.08	b	140	*	57-120	L1 V3
cis-1,2-Dichloroethene	20.00	20.29		101		75-120	
2,2-Dichloropropane	20.00	27.63	b	138	*	72-128	L1 V3
Chloroform	20.00	20.70		103		78-120	
Bromochloromethane	20.00	21.12		106		78-120	
1,1,1-Trichloroethane	20.00	21.70		109		78-120	
1,1-Dichloropropene	20.00	22.40		112		75-120	
Carbon Tetrachloride	20.00	23.17		116		80-120	
1,2-Dichloroethane	20.00	23.28		116		74-120	
Benzene	20.00	21.24		106		77-120	
Trichloroethene	20.00	20.08		100		78-122	
1,2-Dichloropropane	20.00	22.16		111		76-120	
Bromodichloromethane	20.00	21.39		107		78-120	
Dibromomethane	20.00	21.00		105		77-120	
4-Methyl-2-Pentanone	20.00	28.28	b	141	*	65-120	L1 V3
cis-1,3-Dichloropropene	20.00	24.13		121	*	76-120	L1
Toluene	20.00	20.20		101		73-120	
trans-1,3-Dichloropropene	20.00	20.72		104		72-120	
1,1,2-Trichloroethane	20.00	20.88		104		76-120	
2-Hexanone	20.00	27.93	b	140	*	57-121	L1 V3
1,3-Dichloropropane	20.00	21.59		108		75-120	
Tetrachloroethene	20.00	20.78		104		77-120	
Dibromochloromethane	20.00	19.79		99		76-120	
1,2-Dibromoethane	20.00	21.25		106		77-120	
Chlorobenzene	20.00	20.72		104		78-120	
1,1,1,2-Tetrachloroethane	20.00	20.80		104		77-120	
Ethylbenzene	20.00	21.15		106		78-120	
m,p-Xylenes	40.00	44.44		111		77-120	
o-Xylene	20.00	21.44		107		77-120	
Styrene	20.00	21.47		107		77-120	
Bromoform	20.00	17.47		87		74-121	
Isopropylbenzene	20.00	19.07		95		71-120	
1,1,2,2-Tetrachloroethane	20.00	21.81		109		73-120	
1,2,3-Trichloropropane	20.00	20.78		104		72-120	
Propylbenzene	20.00	21.51		108		76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155308
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	20.00	20.46	102	75-120	
1,3,5-Trimethylbenzene	20.00	22.47	112	77-120	
2-Chlorotoluene	20.00	21.39	107	76-120	
4-Chlorotoluene	20.00	20.45	102	78-120	
tert-Butylbenzene	20.00	23.42	117	76-120	
1,2,4-Trimethylbenzene	20.00	22.06	110	77-120	
sec-Butylbenzene	20.00	23.32	117	80-120	
para-Isopropyl Toluene	20.00	24.18	121 *	76-120	L1
1,3-Dichlorobenzene	20.00	20.69	103	75-120	
1,4-Dichlorobenzene	20.00	20.74	104	77-120	
n-Butylbenzene	20.00	24.19	121 *	76-120	L1
1,2-Dichlorobenzene	20.00	20.42	102	76-120	
1,2-Dibromo-3-Chloropropane	20.00	22.32	112	65-120	
1,2,4-Trichlorobenzene	20.00	23.93	120	73-121	
Hexachlorobutadiene	20.00	31.65 b	158 *	73-123	L1 V3
Naphthalene	20.00	26.55	133 *	62-121	L1
1,2,3-Trichlorobenzene	20.00	23.91	120	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	104	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155308
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC513639

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	20.00	21.00	105	56-140	0	24	
Chloromethane	20.00	21.52	108	46-142	3	24	
Vinyl Chloride	20.00	20.35	102	49-136	3	24	
Bromomethane	20.00	13.58 b	68	42-154	13	24	V9
Chloroethane	20.00	19.26	96	51-133	5	25	
Trichlorofluoromethane	20.00	19.38	97	63-135	5	20	
Iodomethane	20.00	12.54 b	63 *	70-130	5	20	L2 V9
Acetone	20.00	23.56	118	48-130	7	41	
1,1-Dichloroethene	20.00	21.17	106	68-133	0	20	
Methylene Chloride	20.00	17.67	88	71-120	2	20	
Carbon Disulfide	20.00	19.62	98	56-120	2	20	
MTBE	20.00	21.43	107	58-120	2	21	
trans-1,2-Dichloroethene	20.00	20.90	104	80-120	1	24	
Vinyl Acetate	20.00	41.00 b	205 *	63-124	6	24	L1 R2 V3
1,1-Dichloroethane	20.00	21.65	108	77-120	2	20	
2-Butanone	20.00	27.28 b	136 *	57-120	3	32	L1 V3
cis-1,2-Dichloroethene	20.00	20.65	103	75-120	2	20	
2,2-Dichloropropane	20.00	26.77 b	134 *	72-128	3	24	L1 V3
Chloroform	20.00	20.36	102	78-120	2	20	
Bromochloromethane	20.00	21.16	106	78-120	0	20	
1,1,1-Trichloroethane	20.00	22.01	110	78-120	1	20	
1,1-Dichloropropene	20.00	22.70	114	75-120	1	21	
Carbon Tetrachloride	20.00	23.05	115	80-120	1	21	
1,2-Dichloroethane	20.00	23.42	117	74-120	1	20	
Benzene	20.00	21.40	107	77-120	1	20	
Trichloroethene	20.00	20.00	100	78-122	0	20	
1,2-Dichloropropane	20.00	22.22	111	76-120	0	20	
Bromodichloromethane	20.00	21.58	108	78-120	1	20	
Dibromomethane	20.00	20.99	105	77-120	0	20	
4-Methyl-2-Pentanone	20.00	28.71 b	144 *	65-120	2	22	L1 V3
cis-1,3-Dichloropropene	20.00	23.96	120	76-120	1	20	
Toluene	20.00	20.31	102	73-120	1	20	
trans-1,3-Dichloropropene	20.00	21.06	105	72-120	2	20	
1,1,2-Trichloroethane	20.00	21.00	105	76-120	1	20	
2-Hexanone	20.00	28.03 b	140 *	57-121	0	25	L1 V3
1,3-Dichloropropane	20.00	21.91	110	75-120	1	20	
Tetrachloroethene	20.00	21.03	105	77-120	1	20	
Dibromochloromethane	20.00	20.19	101	76-120	2	20	
1,2-Dibromoethane	20.00	21.40	107	77-120	1	20	
Chlorobenzene	20.00	20.11	101	78-120	3	20	
1,1,1,2-Tetrachloroethane	20.00	20.74	104	77-120	0	20	
Ethylbenzene	20.00	20.67	103	78-120	2	26	
m,p-Xylenes	40.00	44.03	110	77-120	1	20	
o-Xylene	20.00	21.41	107	77-120	0	20	
Styrene	20.00	21.38	107	77-120	0	20	
Bromoform	20.00	17.45	87	74-121	0	21	
Isopropylbenzene	20.00	18.37	92	71-120	4	20	
1,1,2,2-Tetrachloroethane	20.00	22.96	115	73-120	5	20	
1,2,3-Trichloropropane	20.00	22.17	111	72-120	6	20	
Propylbenzene	20.00	21.21	106	76-120	1	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155308
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	20.00	20.18	101	75-120	1	20	
1,3,5-Trimethylbenzene	20.00	22.27	111	77-120	1	20	
2-Chlorotoluene	20.00	21.15	106	76-120	1	20	
4-Chlorotoluene	20.00	20.32	102	78-120	1	20	
tert-Butylbenzene	20.00	23.43	117	76-120	0	21	
1,2,4-Trimethylbenzene	20.00	22.24	111	77-120	1	20	
sec-Butylbenzene	20.00	23.85	119	80-120	2	21	
para-Isopropyl Toluene	20.00	24.00	120	76-120	1	20	
1,3-Dichlorobenzene	20.00	20.84	104	75-120	1	20	
1,4-Dichlorobenzene	20.00	20.67	103	77-120	0	23	
n-Butylbenzene	20.00	24.09	120	76-120	0	21	
1,2-Dichlorobenzene	20.00	20.51	103	76-120	0	20	
1,2-Dibromo-3-Chloropropane	20.00	22.53	113	65-120	1	22	
1,2,4-Trichlorobenzene	20.00	24.48	122 *	73-121	2	20	L1
Hexachlorobutadiene	20.00	31.76 b	159 *	73-123	0	25	L1 V3
Naphthalene	20.00	27.48	137 *	62-121	3	32	L1
1,2,3-Trichlorobenzene	20.00	24.83	124 *	66-123	4	29	L1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	106	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513642	Batch#:	155308
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	L1 V1
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	L1 V1
cis-1,3-Dichloropropene	ND	0.5	L1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	L1 V1
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513642	Batch#:	155308
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	L1
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	L1
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	L1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	119	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	109	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513643	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	32.79 b	131	56-140	V3
Chloromethane	25.00	28.19	113	46-142	
Vinyl Chloride	25.00	29.81	119	49-136	
Bromomethane	25.00	32.65 b	131	42-154	V3
Chloroethane	25.00	28.76	115	51-133	
Trichlorofluoromethane	25.00	27.30	109	63-135	
Iodomethane	25.00	35.57 b	142 *	70-130	L1 V3
Acetone	25.00	27.07	108	48-130	
1,1-Dichloroethene	25.00	27.97	112	68-133	
Methylene Chloride	25.00	28.04	112	71-120	
Carbon Disulfide	25.00	26.65	107	56-120	
MTBE	25.00	26.20	105	58-120	
trans-1,2-Dichloroethene	25.00	29.92	120	80-120	
Vinyl Acetate	25.00	23.23	93	63-124	
1,1-Dichloroethane	25.00	27.79	111	77-120	
2-Butanone	25.00	25.44	102	57-120	
cis-1,2-Dichloroethene	25.00	28.57	114	75-120	
2,2-Dichloropropane	25.00	27.74	111	72-128	
Chloroform	25.00	25.83	103	78-120	
Bromochloromethane	25.00	28.27	113	78-120	
1,1,1-Trichloroethane	25.00	26.21	105	78-120	
1,1-Dichloropropene	25.00	25.43	102	75-120	
Carbon Tetrachloride	25.00	23.59	94	80-120	
1,2-Dichloroethane	25.00	23.02	92	74-120	
Benzene	25.00	27.14	109	77-120	
Trichloroethene	25.00	26.80	107	78-122	
1,2-Dichloropropane	25.00	25.75	103	76-120	
Bromodichloromethane	25.00	25.59	102	78-120	
Dibromomethane	25.00	25.33	101	77-120	
4-Methyl-2-Pentanone	25.00	21.59	86	65-120	
cis-1,3-Dichloropropene	25.00	27.70	111	76-120	
Toluene	25.00	25.40	102	73-120	
trans-1,3-Dichloropropene	25.00	23.29	93	72-120	
1,1,2-Trichloroethane	25.00	25.65	103	76-120	
2-Hexanone	25.00	21.73	87	57-121	
1,3-Dichloropropane	25.00	25.44	102	75-120	
Tetrachloroethene	25.00	23.52	94	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513643	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.52	98	76-120	
1,2-Dibromoethane	25.00	25.08	100	77-120	
Chlorobenzene	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.18	97	77-120	
Ethylbenzene	25.00	25.71	103	78-120	
m,p-Xylenes	50.00	51.49	103	77-120	
o-Xylene	25.00	24.86	99	77-120	
Styrene	25.00	25.89	104	77-120	
Bromoform	25.00	22.75	91	74-121	
Isopropylbenzene	25.00	24.11	96	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.25	101	73-120	
1,2,3-Trichloropropane	25.00	28.32	113	72-120	
Propylbenzene	25.00	25.60	102	76-120	
Bromobenzene	25.00	26.67	107	75-120	
1,3,5-Trimethylbenzene	25.00	28.19	113	77-120	
2-Chlorotoluene	25.00	27.97	112	76-120	
4-Chlorotoluene	25.00	26.72	107	78-120	
tert-Butylbenzene	25.00	22.84	91	76-120	
1,2,4-Trimethylbenzene	25.00	28.79	115	77-120	
sec-Butylbenzene	25.00	22.67	91	80-120	
para-Isopropyl Toluene	25.00	24.58	98	76-120	
1,3-Dichlorobenzene	25.00	25.74	103	75-120	
1,4-Dichlorobenzene	25.00	25.06	100	77-120	
n-Butylbenzene	25.00	35.59 b	142 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.77	103	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.05	100	65-120	
1,2,4-Trichlorobenzene	25.00	25.99	104	73-121	
Hexachlorobutadiene	25.00	21.70	87	73-123	
Naphthalene	25.00	29.17	117	62-121	
1,2,3-Trichlorobenzene	25.00	27.18	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	107	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513644	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513644	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513653

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	37.28 b	149 *	56-140	M1 V3
Chloromethane	<0.2000	25.00	37.53	150 *	46-142	M1
Vinyl Chloride	1.384	25.00	38.20	147 *	49-136	M1
Bromomethane	<0.2000	25.00	35.89 b	144	42-154	V3
Chloroethane	<0.2000	25.00	33.77	135 *	51-133	M1
Trichlorofluoromethane	<0.2000	25.00	32.00	128	63-135	
Iodomethane	<2.000	25.00	38.41 b	154 *	60-140	M1 V3
Acetone	<1.000	25.00	28.85	115	48-130	
1,1-Dichloroethene	0.5104	25.00	32.67	129	68-133	
Methylene Chloride	0.1794	25.00	31.95	127 *	71-120	M1
Carbon Disulfide	<0.1000	25.00	31.55	126 *	56-120	M1
MTBE	4.524	25.00	35.52	124 *	58-120	M1
trans-1,2-Dichloroethene	<0.1000	25.00	34.28	137 *	80-120	M1
Vinyl Acetate	<2.000	25.00	25.58	102	63-124	
1,1-Dichloroethane	8.970	25.00	43.19	137 *	77-120	M1
2-Butanone	<2.000	25.00	30.05	120	57-120	
cis-1,2-Dichloroethene	1.967	25.00	34.27	129 *	75-120	M1
2,2-Dichloropropane	<0.1000	25.00	30.58	122	72-128	
Chloroform	0.2213	25.00	31.78	126 *	78-120	M1
Bromochloromethane	<0.1000	25.00	31.76	127 *	78-120	M1
1,1,1-Trichloroethane	<0.1131	25.00	33.46	134 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	30.02	120	75-120	
Carbon Tetrachloride	<0.1000	25.00	28.49	114	80-120	
1,2-Dichloroethane	<0.1000	25.00	28.46	114	74-120	
Benzene	<0.1000	25.00	30.68	123 *	77-120	M1
Trichloroethene	5.707	25.00	35.48	119	78-122	
1,2-Dichloropropane	<0.1000	25.00	29.60	118	76-120	
Bromodichloromethane	<0.1000	25.00	29.55	118	78-120	
Dibromomethane	<0.1000	25.00	27.92	112	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	24.57	98	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	30.17	121 *	76-120	M1
Toluene	<0.1000	25.00	26.99	108	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	24.78	99	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	28.16	113	76-120	
2-Hexanone	<2.000	25.00	21.41	86	57-121	
1,3-Dichloropropane	<0.1000	25.00	27.92	112	75-120	
Tetrachloroethene	0.2248	25.00	24.87	99	77-120	
Dibromochloromethane	<0.1000	25.00	25.99	104	76-120	
1,2-Dibromoethane	<0.1000	25.00	26.03	104	77-120	
Chlorobenzene	<0.1000	25.00	26.31	105	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	26.03	104	77-120	
Ethylbenzene	<0.1000	25.00	28.12	112	78-120	
m,p-Xylenes	<0.1594	50.00	53.64	107	77-120	
o-Xylene	<0.1000	25.00	25.92	104	77-120	
Styrene	<0.1000	25.00	26.66	107	77-120	
Bromoform	<0.2000	25.00	23.38	94	74-121	
Isopropylbenzene	<0.1000	25.00	25.58	102	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	27.93	112	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	31.07	124 *	72-120	M1
Propylbenzene	<0.1000	25.00	27.28	109	76-120	
Bromobenzene	<0.1000	25.00	27.60	110	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	30.44	122 *	77-120	M1
2-Chlorotoluene	<0.1000	25.00	30.20	121 *	76-120	M1
4-Chlorotoluene	<0.1000	25.00	28.09	112	78-120	
tert-Butylbenzene	<0.1000	25.00	23.93	96	76-120	
1,2,4-Trimethylbenzene	0.1004	25.00	31.62	126 *	77-120	M1
sec-Butylbenzene	<0.1029	25.00	24.51	98	80-120	
para-Isopropyl Toluene	<0.1000	25.00	26.92	108	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	26.33	105	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	25.48	102	77-120	
n-Butylbenzene	<0.1285	25.00	41.24 b	165 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	26.63	107	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	27.02	108	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	27.09	108	73-121	
Hexachlorobutadiene	<0.4000	25.00	23.22	93	73-123	
Naphthalene	<0.4000	25.00	30.87	123 *	62-121	M1
1,2,3-Trichlorobenzene	<0.1149	25.00	28.56	114	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	110	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513654

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	32.90 b	132	56-140	12	24	V3
Chloromethane	25.00	32.52	130	46-142	14	24	
Vinyl Chloride	25.00	33.30	128	49-136	14	24	
Bromomethane	25.00	32.65 b	131	42-154	9	24	V3
Chloroethane	25.00	29.11	116	51-133	15	25	
Trichlorofluoromethane	25.00	27.04	108	63-135	17	20	
Iodomethane	25.00	34.41 b	138	60-140	11	30	V3
Acetone	25.00	27.05	108	48-130	6	41	
1,1-Dichloroethene	25.00	27.64	109	68-133	17	20	
Methylene Chloride	25.00	27.74	110	71-120	14	20	
Carbon Disulfide	25.00	26.46	106	56-120	18	20	
MTBE	25.00	32.36	111	58-120	9	21	
trans-1,2-Dichloroethene	25.00	29.14	117	80-120	16	24	
Vinyl Acetate	25.00	22.04	88	63-124	15	24	
1,1-Dichloroethane	25.00	36.59	110	77-120	17	20	
2-Butanone	25.00	25.98	104	57-120	15	32	
cis-1,2-Dichloroethene	25.00	29.50	110	75-120	15	20	
2,2-Dichloropropane	25.00	25.17	101	72-128	19	24	
Chloroform	25.00	26.65	106	78-120	18	20	
Bromochloromethane	25.00	27.41	110	78-120	15	20	
1,1,1-Trichloroethane	25.00	28.16	113	78-120	17	20	
1,1-Dichloropropene	25.00	25.20	101	75-120	17	21	
Carbon Tetrachloride	25.00	23.84	95	80-120	18	21	
1,2-Dichloroethane	25.00	24.06	96	74-120	17	20	
Benzene	25.00	25.97	104	77-120	17	20	
Trichloroethene	25.00	30.85	101	78-122	14	20	
1,2-Dichloropropane	25.00	25.26	101	76-120	16	20	
Bromodichloromethane	25.00	25.03	100	78-120	17	20	
Dibromomethane	25.00	24.49	98	77-120	13	20	
4-Methyl-2-Pentanone	25.00	22.19	89	65-120	10	22	
cis-1,3-Dichloropropene	25.00	26.13	105	76-120	14	20	
Toluene	25.00	23.12	92	73-120	15	20	
trans-1,3-Dichloropropene	25.00	21.54	86	72-120	14	20	
1,1,2-Trichloroethane	25.00	24.26	97	76-120	15	20	
2-Hexanone	25.00	19.45	78	57-121	10	25	
1,3-Dichloropropane	25.00	24.58	98	75-120	13	20	
Tetrachloroethene	25.00	21.32	84	77-120	15	20	
Dibromochloromethane	25.00	22.89	92	76-120	13	20	
1,2-Dibromoethane	25.00	23.38	94	77-120	11	20	
Chlorobenzene	25.00	22.74	91	78-120	15	20	
1,1,1,2-Tetrachloroethane	25.00	22.31	89	77-120	15	20	
Ethylbenzene	25.00	23.92	96	78-120	16	26	
m,p-Xylenes	50.00	45.00	90	77-120	18	20	
o-Xylene	25.00	21.82	87	77-120	17	20	
Styrene	25.00	22.43	90	77-120	17	20	
Bromoform	25.00	20.95	84	74-121	11	21	
Isopropylbenzene	25.00	22.16	89	71-120	14	20	
1,1,2,2-Tetrachloroethane	25.00	25.82	103	73-120	8	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	28.67	115	72-120	8	20	
Propylbenzene	25.00	23.14	93	76-120	16	20	
Bromobenzene	25.00	24.68	99	75-120	11	20	
1,3,5-Trimethylbenzene	25.00	26.51	106	77-120	14	20	
2-Chlorotoluene	25.00	26.13	105	76-120	14	20	
4-Chlorotoluene	25.00	24.14	97	78-120	15	20	
tert-Butylbenzene	25.00	20.54	82	76-120	15	21	
1,2,4-Trimethylbenzene	25.00	27.87	111	77-120	13	20	
sec-Butylbenzene	25.00	21.12	84	80-120	15	21	
para-Isopropyl Toluene	25.00	23.46	94	76-120	14	20	
1,3-Dichlorobenzene	25.00	22.75	91	75-120	15	20	
1,4-Dichlorobenzene	25.00	22.26	89	77-120	13	23	
n-Butylbenzene	25.00	33.82 b	135 *	76-120	20	21	M1 V3
1,2-Dichlorobenzene	25.00	23.46	94	76-120	13	20	
1,2-Dibromo-3-Chloropropane	25.00	24.54	98	65-120	10	22	
1,2,4-Trichlorobenzene	25.00	24.37	97	73-121	11	20	
Hexachlorobutadiene	25.00	20.62	82	73-123	12	25	
Naphthalene	25.00	28.71	115	62-121	7	32	
1,2,3-Trichlorobenzene	25.00	26.11	104	66-123	9	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	112	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479315844008 File : hh708 Time : 07-AUG-2009 11:41

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	11812	17.13	
75	30% - 60% of mass 95	29493	42.78	
95		68936	100.00	
96	5% - 9% of mass 95	4074	5.91	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	65805	95.46	
175	5% - 9% of mass 174	5150	7.83	
176	> 95% and < 101% of mass 174	64186	97.54	
177	5% - 9% of mass 176	4366	6.80	

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

CURTIS & TOMPKINS BFB TUNE FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479320168003 File : hha03 Time : 10-AUG-2009 09:02

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	16882	21.63	
75	30% - 60% of mass 95	39086	50.08	
95		78040	100.00	
96	5% - 9% of mass 95	5159	6.61	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	65181	83.52	
175	5% - 9% of mass 174	4957	7.60	
176	> 95% and < 101% of mass 174	62109	95.29	
177	5% - 9% of mass 176	3831	6.17	

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

CURTIS & TOMPKINS BFB TUNE FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 479386455002 File : hip02 Time : 25-SEP-2009 09:10

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	22616	24.24	
75	30% - 60% of mass 95	47205	50.59	
95		93302	100.00	
96	5% - 9% of mass 95	6796	7.28	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	72789	78.01	
175	5% - 9% of mass 174	6165	8.47	
176	> 95% and < 101% of mass 174	70965	97.49	
177	5% - 9% of mass 176	4481	6.31	

Analyst: MJD Date: 09/25/09 Reviewer: LW Date: 09/28/09

CURTIS & TOMPKINS BFB TUNE FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839384947003 File : kio03 Time : 24-SEP-2009 08:23

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	15064	16.59	
75	30% - 60% of mass 95	42960	47.30	
95		90829	100.00	
96	5% - 9% of mass 95	6194	6.82	
173	< 2% of mass 174	118	0.18	
174	> 50% and < 100% of mass 95	64893	71.45	
175	5% - 9% of mass 174	4914	7.57	
176	> 95% and < 101% of mass 174	63775	98.28	
177	5% - 9% of mass 176	4504	7.06	

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS BFB TUNE FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839386393006 File : kip06 Time : 25-SEP-2009 09:38

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	16216	15.87	
75	30% - 60% of mass 95	48227	47.21	
95		102152	100.00	
96	5% - 9% of mass 95	7663	7.50	
173	< 2% of mass 174	316	0.42	
174	> 50% and < 100% of mass 95	75722	74.13	
175	5% - 9% of mass 174	5360	7.08	
176	> 95% and < 101% of mass 174	73865	97.55	
177	5% - 9% of mass 176	4860	6.58	

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 MSVOA Water: EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 479315844001 Date : 07-AUG-2009 13:33 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	hh711	479315844011	0.25/0.5PPB	07-AUG-2009 13:33	S12664 (200000X), S12665 (200000X), S12666 (200000X), S12667 (100000X), S12562 (5000X)
L2	hh712	479315844012	0.5/1PPB	07-AUG-2009 14:09	S12664 (100000X), S12665 (100000X), S12666 (100000X), S12667 (50000X), S12562 (5000X)
L3	hh713	479315844013	2PPB	07-AUG-2009 14:45	S12664 (25000X), S12665 (25000X), S12666 (50000X), S12667 (25000X), S12562 (5000X)
L4	hh714	479315844014	5PPB	07-AUG-2009 15:21	S12664 (10000X), S12665 (10000X), S12666 (20000X), S12667 (10000X), S12562 (5000X)
L5	hh715	479315844015	10PPB	07-AUG-2009 15:57	S12664 (5000X), S12665 (5000X), S12666 (10000X), S12667 (5000X), S12562 (5000X)
L6	hh716	479315844016	20PPB	07-AUG-2009 16:33	S12508 (25000X), S12517 (25000X), S12217 (50000X), S12487 (25000X), S12562 (5000X)
L7	hh717	479315844017	50PPB	07-AUG-2009 17:09	S12508 (10000X), S12517 (10000X), S12217 (20000X), S12487 (10000X), S12562 (5000X)
L8	hh718	479315844018	75PPB	07-AUG-2009 17:45	S12508 (6667X), S12517 (6667X), S12217 (13330X), S12487 (6667X), S12562 (5000X)
L9	hh719	479315844019	100PPB	07-AUG-2009 18:21	S12508 (5000X), S12517 (5000X), S12217 (10000X), S12487 (5000X), S12562 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.2824m	0.3907m	0.3765m	0.3794m	0.3896m	0.4061m	0.3838m	0.3558m	AVRG		2.69882		0.3705	10	15	0.05	0.99	
Chloromethane		0.3645m	0.4223m	0.4027	0.3499m	0.3426m	0.3376	0.3291	0.3071	AVRG		2.80142		0.3570	11	15	0.10	0.99	
Vinyl Chloride	0.2666m	0.2639m	0.3623m	0.3535m	0.3222m	0.3280m	0.3307m	0.3186	0.2968	AVRG		3.16622		0.3158	11	15	0.05	0.99	
Bromomethane		0.1490m	0.2129m	0.2217m	0.1859m	0.1914m	0.2116m	0.2064m	0.2062m	AVRG		5.04732		0.1981	12	15	0.05	0.99	
Chloroethane		0.1683m	0.2004m	0.1944m	0.1673m	0.1695m	0.1668m	0.1636m	0.1579m	AVRG		5.76307		0.1735	9	15	0.05	0.99	
Trichlorofluoromethane		0.2472	0.3436	0.3357	0.3332	0.3443	0.3451	0.3376	0.3208	AVRG		3.06810		0.3259	10	15	0.05	0.99	
Acetone			0.0974	0.0900	0.0815	0.0868	0.0861	0.0923	0.0999	AVRG		11.0425		0.0906	7	15	0.05	0.99	
1,1-Dichloroethene		0.1699m	0.2263m	0.2366	0.2281	0.2083	0.2291	0.2172	0.2273	AVRG		4.59046		0.2178	10	15	0.05	0.99	
Iodomethane		0.2109m	0.1601m	0.1934m	0.1935m	0.2013	0.2259	0.2385	0.2387	AVRG		4.81268		0.2078	13	15	0.05	0.99	
Methylene Chloride		0.3831m	0.3660m	0.3453m	0.3114m	0.2965m	0.2850	0.2877	0.2842	AVRG		3.12591		0.3199	12	15	0.05	0.99	
Carbon Disulfide		0.6980	1.0146	0.9690	0.8853	0.8285	0.8505	0.7946	0.8188	AVRG		1.16631		0.8574	12	15	0.05	0.99	
MTBE		0.6554	0.7078	0.7233	0.7199	0.7367	0.7275	0.7132	0.6902	AVRG		1.40994		0.7092	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.2468m	0.2893	0.2841	0.2648	0.2516	0.2563	0.2408	0.2471	AVRG		3.84452		0.2601	7	15	0.05	0.99	
Vinyl Acetate		0.2211	0.3097	0.2822	0.4601	0.2254m	0.4306	0.2698	0.1441	AVRG		3.41428		0.2929	**36**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.4219	0.5014	0.4998	0.4467	0.4379	0.4244	0.4016	0.4091	AVRG		2.25802		0.4429	9	15	0.10	0.99	
2-Butanone			0.1179	0.1100	0.1032	0.1066	0.1040	0.1073	0.1048	AVRG		9.28610		0.1077	5	15	0.05	0.99	
2,2-Dichloropropane		0.2300	0.3164	0.3087	0.3206	0.2653	0.2623	0.2439	0.2571	AVRG		3.62930		0.2755	13	15	0.05	0.99	
cis-1,2-Dichloroethene		0.2659	0.3176	0.3156	0.2907	0.2878	0.2799	0.2730	0.2681	AVRG		3.48032		0.2873	7	15	0.05	0.99	
Chloroform		0.5253	0.5202	0.5072	0.4593	0.4427	0.4258	0.3992	0.3950	AVRG		2.17702		0.4593	11	15	0.05	0.99	
Bromochloromethane		0.1384	0.1495	0.1543	0.1448	0.1489	0.1476	0.1370	0.1310	AVRG		6.94825		0.1439	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.2831	0.3677	0.3507	0.3413	0.2994	0.3200	0.2900	0.3093	AVRG		3.12318		0.3202	9	15	0.05	0.99	
1,1-Dichloropropene		0.2089	0.2776	0.2654	0.2510	0.2228	0.2347	0.2017	0.2182	AVRG		4.25456		0.2350	12	15	0.05	0.99	
Carbon Tetrachloride		0.1726	0.2080	0.1948	0.1938	0.1712	0.1882	0.1603	0.1785	AVRG		5.45142		0.1834	8	15	0.05	0.99	
1,2-Dichloroethane		0.2158	0.2289	0.2304	0.2248	0.2304	0.2283	0.2204	0.2152	AVRG		4.45885		0.2243	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		0.7284	0.7534	0.7877	0.6968	0.6757	0.6417	0.5652	0.5366	AVRG		1.48546		0.6732	13	15	0.05	0.99	
Trichloroethene		0.1751	0.2047	0.2072	0.1859	0.1909	0.1780	0.1720	0.1830	AVRG		5.34507		0.1871	7	15	0.05	0.99	
1,2-Dichloropropane		0.1819	0.1814m	0.1926	0.1806	0.1809	0.1738	0.1649	0.1635	AVRG		5.63522		0.1775	5	15	0.05	0.99	
Bromodichloromethane		0.2229	0.2479	0.2549	0.2451	0.2474	0.2455	0.2347	0.2275	AVRG		4.15420		0.2407	5	15	0.05	0.99	
Dibromomethane		0.1229	0.1350	0.1390	0.1351	0.1365	0.1360	0.1302	0.1281	AVRG		7.52691		0.1329	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.1378	0.1501	0.1471	0.1612	0.1632	0.1619	0.1600	AVRG		6.47384		0.1545	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.2453	0.2773	0.2791	0.2810	0.2811	0.2754	0.2615	0.2594	AVRG		3.70343		0.2700	5	15	0.05	0.99	
Toluene		0.5221	0.6022	0.6115	0.5382	0.5279	0.5323	0.4729	0.4762	AVRG		1.86768		0.5354	9	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2715	0.3034	0.3241	0.3264	0.3326	0.3353	0.3231	0.3127	AVRG		3.16308		0.3161	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1073	0.1142	0.1223	0.1199	0.1223	0.1209	0.1132	0.1139	AVRG		8.56460		0.1168	5	15	0.05	0.99	
2-Hexanone			0.1220	0.1260	0.1244	0.1404	0.1422	0.1442	0.1401	AVRG		7.45195		0.1342	7	15	0.05	0.99	
1,3-Dichloropropane		0.3194	0.3536	0.3660	0.3489	0.3582	0.3605	0.3347	0.3246	AVRG		2.89240		0.3457	5	15	0.05	0.99	
Tetrachloroethene		0.1942	0.2680	0.2619	0.2374	0.2216	0.2368	0.1968	0.2253	AVRG		4.34300		0.2303	12	15	0.05	0.99	
Dibromochloromethane		0.2008	0.2225	0.2389	0.2354	0.2481	0.2546	0.2402	0.2373	AVRG		4.26018		0.2347	7	15	0.05	0.99	
1,2-Dibromoethane		0.1934	0.2210	0.2267	0.2225	0.2298	0.2303	0.2176	0.2160	AVRG		4.55254		0.2197	5	15	0.05	0.99	
Chlorobenzene		0.5952	0.6472	0.6332	0.5913	0.5749	0.5612	0.5127	0.5044	AVRG		1.73160		0.5775	9	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2020	0.2200	0.2192	0.2154	0.2161	0.2120	0.1976	0.1961	AVRG		4.76677		0.2098	5	15	0.05	0.99	
Ethylbenzene		0.9995	1.1703	1.1383	1.0453	0.9780	0.9432	0.7950	0.7944	AVRG		1.01729		0.9830	14	15	0.05	0.99	
m,p-Xylenes	0.3703	0.3643	0.4178	0.4074	0.3794	0.3569	0.3452	0.2797	0.2679	AVRG		2.82224		0.3543	14	15	0.05	0.99	
o-Xylene		0.3437	0.3828	0.4083	0.3761	0.3628	0.3614	0.3191	0.3160	AVRG		2.78729		0.3588	9	15	0.05	0.99	
Styrene		0.5696	0.6639	0.6778	0.6162	0.6328	0.6077	0.5470	0.5161	AVRG		1.65597		0.6039	9	15	0.05	0.99	
Bromoform		0.1438	0.1529	0.1732	0.1629	0.1763	0.1828	0.1786	0.1783	AVRG		5.93139		0.1686	8	15	0.10	0.99	
Isopropylbenzene		1.3572	1.7661	1.7999	1.6966	1.5645	1.5355	1.2464	1.3381	AVRG		0.65019		1.5380	14	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.4370	0.4681	0.4833	0.5074	0.4800	0.5073	0.4627	0.4211	AVRG		2.12375		0.4709	7	15	0.30	0.99	
1,2,3-Trichloropropane		0.1155	0.1227	0.1218	0.1161	0.1334	0.1296	0.1267	0.1261	AVRG		8.06509		0.1240	5	15	0.05	0.99	
Propylbenzene		1.8208	2.2128	2.1790	2.0700	1.8543	1.7713	1.3998		AVRG		0.52600		1.9011	15	15	0.05	0.99	
Bromobenzene		0.5048	0.5064	0.5198	0.4861	0.5101	0.4958	0.4390	0.4052	AVRG		2.06867		0.4834	8	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.0780	1.3398	1.3365	1.2225	1.1590	1.1275	0.9340	0.9349	AVRG		0.87603		1.1415	14	15	0.05	0.99	
2-Chlorotoluene		1.2870	1.4926	1.5051	1.3575	1.3199	1.2199	1.0508	1.0176	AVRG		0.78046		1.2813	14	15	0.05	0.99	
4-Chlorotoluene		1.1990	1.3505	1.3578	1.2892	1.2330	1.1863	1.0646	1.0896	AVRG		0.81884		1.2212	9	15	0.05	0.99	
tert-Butylbenzene		0.8110	1.0938	1.1203	1.0554	0.9396	0.9915	0.8204	0.9202	AVRG		1.03195		0.9690	12	15	0.05	0.99	
1,2,4-Trimethylbenzene		1.0586	1.1600	1.2280	1.1506	1.0854	1.1039	0.9926	1.0317	AVRG		0.90798		1.1014	7	15	0.05	0.99	
sec-Butylbenzene		1.1889	1.5824	1.5850	1.5618	1.3170	1.4232	1.1318	1.2763	AVRG		0.72292		1.3833	13	15	0.05	0.99	
para-Isopropyl Toluene	1.1087	0.9190	0.7081m	1.1902	1.1512	1.0174	1.0965	0.8978	1.0250	AVRG		0.98751		1.0126	15	15	0.05	0.99	
1,3-Dichlorobenzene		0.8011	0.8557	0.8874	0.8231	0.8164	0.7839	0.7107	0.7287	AVRG		1.24865		0.8009	7	15	0.05	0.99	
1,4-Dichlorobenzene		0.8895	0.8700	0.8831	0.8039	0.8145	0.7792	0.7169	0.7133	AVRG		1.23640		0.8088	9	15	0.05	0.99	
n-Butylbenzene		0.7991	0.9655	0.9698	0.9750	0.8194	0.9124	0.7639	0.8850	AVRG		1.12836		0.8862	9	15	0.05	0.99	
1,2-Dichlorobenzene		0.7602	0.8186	0.8197	0.7692	0.7851	0.7532	0.7167	0.7243	AVRG		1.30147		0.7684	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0764m	0.0664m	0.0705m	0.0758	0.0778	0.0827	0.0826	0.0839	AVRG		12.9881		0.0770	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.2607	0.2350	0.2571	0.2492	0.2380	0.2637	0.2522	0.2883	AVRG		3.91365		0.2555	7	15	0.05	0.99	
Hexachlorobutadiene		0.0778	0.0750	0.0861	0.0797	0.0726	0.0802	0.0667	0.0906	AVRG		12.7226		0.0786	10	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		0.6621	0.6514	0.6812	0.6823	0.6881	0.7174	0.7071	0.7483	AVRG		1.44465		0.6922	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.2345	0.2239	0.2270	0.2295	0.2345	0.2516	0.2428	0.2688	AVRG		4.18272		0.2391	6	15	0.05	0.99	
Dibromofluoromethane	0.5059	0.5179	0.5296	0.5290	0.5324	0.5220	0.5278	0.5280	0.5246	AVRG		1.90786		0.5241	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3380	0.3396	0.3387	0.3404	0.3360	0.3274	0.3212	0.3093	0.3035	AVRG		3.04660		0.3282	4	15	0.05	0.99	
Toluene-d8	1.2284	1.2499	1.2638	1.2532	1.2441	1.2455	1.2703	1.2548	1.2618	AVRG		0.79845		1.2524	1	15	0.05	0.99	
Bromofluorobenzene	0.8615	0.8726	0.8620	0.8830	0.8889	0.8925	0.8782	0.8626	0.8385	AVRG		1.14800		0.8711	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-24	2.000	5	5.000	2	10.00	2	20.00	5	50.00	10	75.00	4	100.0	-4
Chloromethane			1.000	2	2.000	18	5.000	13	10.00	-2	20.00	-4	50.00	-5	75.00	-8	100.0	-14
Vinyl Chloride	0.500	-16	1.000	-16	2.000	15	5.000	12	10.00	2	20.00	4	50.00	5	75.00	1	100.0	-6
Bromomethane			1.000	-25	2.000	7	5.000	12	10.00	-6	20.00	-3	50.00	7	75.00	4	100.0	4
Chloroethane			1.000	-3	2.000	15	5.000	12	10.00	-4	20.00	-2	50.00	-4	75.00	-6	100.0	-9
Trichlorofluoromethane			1.000	-24	2.000	5	5.000	3	10.00	2	20.00	6	50.00	6	75.00	4	100.0	-2
Acetone					2.000	8	5.000	-1	10.00	-10	20.00	-4	50.00	-5	75.00	2	100.0	10
1,1-Dichloroethene			0.500	-22	2.000	4	5.000	9	10.00	5	20.00	-4	50.00	5	75.00	0	100.0	4
Iodomethane			0.500	2	2.000	-23	5.000	-7	10.00	-7	20.00	-3	50.00	9	75.00	15	100.0	15
Methylene Chloride			0.500	20	2.000	14	5.000	8	10.00	-3	20.00	-7	50.00	-11	75.00	-10	100.0	-11
Carbon Disulfide			0.500	-19	2.000	18	5.000	13	10.00	3	20.00	-3	50.00	-1	75.00	-7	100.0	-5
MTBE			0.500	-8	2.000	0	5.000	2	10.00	2	20.00	4	50.00	3	75.00	1	100.0	-3
trans-1,2-Dichloroethene			0.500	-5	2.000	11	5.000	9	10.00	2	20.00	-3	50.00	-1	75.00	-7	100.0	-5
Vinyl Acetate			0.500	-24	2.000	6	5.000	-4	10.00	57	20.00	-23	50.00	47	75.00	-8	100.0	-51
1,1-Dichloroethane			0.500	-5	2.000	13	5.000	13	10.00	1	20.00	-1	50.00	-4	75.00	-9	100.0	-8
2-Butanone					2.000	10	5.000	2	10.00	-4	20.00	-1	50.00	-3	75.00	0	100.0	-3
2,2-Dichloropropane			0.500	-17	2.000	15	5.000	12	10.00	16	20.00	-4	50.00	-5	75.00	-11	100.0	-7
cis-1,2-Dichloroethene			0.500	-7	2.000	11	5.000	10	10.00	1	20.00	0	50.00	-3	75.00	-5	100.0	-7
Chloroform			0.500	14	2.000	13	5.000	10	10.00	0	20.00	-4	50.00	-7	75.00	-13	100.0	-14
Bromochloromethane			0.500	-4	2.000	4	5.000	7	10.00	1	20.00	3	50.00	3	75.00	-5	100.0	-9
1,1,1-Trichloroethane			0.500	-12	2.000	15	5.000	10	10.00	7	20.00	-6	50.00	0	75.00	-9	100.0	-3
1,1-Dichloropropene			0.500	-11	2.000	18	5.000	13	10.00	7	20.00	-5	50.00	0	75.00	-14	100.0	-7
Carbon Tetrachloride			0.500	-6	2.000	13	5.000	6	10.00	6	20.00	-7	50.00	3	75.00	-13	100.0	-3
1,2-Dichloroethane			0.500	-4	2.000	2	5.000	3	10.00	0	20.00	3	50.00	2	75.00	-2	100.0	-4
Benzene			0.500	8	2.000	12	5.000	17	10.00	4	20.00	0	50.00	-5	75.00	-16	100.0	-20
Trichloroethene			0.500	-6	2.000	9	5.000	11	10.00	-1	20.00	2	50.00	-5	75.00	-8	100.0	-2
1,2-Dichloropropane			0.500	2	2.000	2	5.000	9	10.00	2	20.00	2	50.00	-2	75.00	-7	100.0	-8
Bromodichloromethane			0.500	-7	2.000	3	5.000	6	10.00	2	20.00	3	50.00	2	75.00	-2	100.0	-6
Dibromomethane			0.500	-8	2.000	2	5.000	5	10.00	2	20.00	3	50.00	2	75.00	-2	100.0	-4
4-Methyl-2-Pentanone					2.000	-11	5.000	-3	10.00	-5	20.00	4	50.00	6	75.00	5	100.0	4
cis-1,3-Dichloropropene			0.500	-9	2.000	3	5.000	3	10.00	4	20.00	4	50.00	2	75.00	-3	100.0	-4
Toluene			0.500	-2	2.000	12	5.000	14	10.00	1	20.00	-1	50.00	-1	75.00	-12	100.0	-11
trans-1,3-Dichloropropene			0.500	-14	2.000	-4	5.000	3	10.00	3	20.00	5	50.00	6	75.00	2	100.0	-1
1,1,2-Trichloroethane			0.500	-8	2.000	-2	5.000	5	10.00	3	20.00	5	50.00	4	75.00	-3	100.0	-2
2-Hexanone					2.000	-9	5.000	-6	10.00	-7	20.00	5	50.00	6	75.00	7	100.0	4
1,3-Dichloropropane			0.500	-8	2.000	2	5.000	6	10.00	1	20.00	4	50.00	4	75.00	-3	100.0	-6
Tetrachloroethene			0.500	-16	2.000	16	5.000	14	10.00	3	20.00	-4	50.00	3	75.00	-15	100.0	-2
Dibromochloromethane			0.500	-14	2.000	-5	5.000	2	10.00	0	20.00	6	50.00	8	75.00	2	100.0	1
1,2-Dibromoethane			0.500	-12	2.000	1	5.000	3	10.00	1	20.00	5	50.00	5	75.00	-1	100.0	-2
Chlorobenzene			0.500	3	2.000	12	5.000	10	10.00	2	20.00	0	50.00	-3	75.00	-11	100.0	-13
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	5	5.000	5	10.00	3	20.00	3	50.00	1	75.00	-6	100.0	-7
Ethylbenzene			0.500	2	2.000	19	5.000	16	10.00	6	20.00	-1	50.00	-4	75.00	-19	100.0	-19

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	5	1.000	3	4.000	18	10.00	15	20.00	7	40.00	1	100.0	-3	150.0	-21	200.0	-24
o-Xylene			0.500	-4	2.000	7	5.000	14	10.00	5	20.00	1	50.00	1	75.00	-11	100.0	-12
Styrene			0.500	-6	2.000	10	5.000	12	10.00	2	20.00	5	50.00	1	75.00	-9	100.0	-15
Bromoform			0.500	-15	2.000	-9	5.000	3	10.00	-3	20.00	5	50.00	8	75.00	6	100.0	6
Isopropylbenzene			0.500	-12	2.000	15	5.000	17	10.00	10	20.00	2	50.00	0	75.00	-19	100.0	-13
1,1,2,2-Tetrachloroethane			0.500	-7	2.000	-1	5.000	3	10.00	8	20.00	2	50.00	8	75.00	-2	100.0	-11
1,2,3-Trichloropropane			0.500	-7	2.000	-1	5.000	-2	10.00	-6	20.00	8	50.00	5	75.00	2	100.0	2
Propylbenzene			0.500	-4	2.000	16	5.000	15	10.00	9	20.00	-2	50.00	-7	75.00	-26		
Bromobenzene			0.500	4	2.000	5	5.000	8	10.00	1	20.00	6	50.00	3	75.00	-9	100.0	-16
1,3,5-Trimethylbenzene			0.500	-6	2.000	17	5.000	17	10.00	7	20.00	2	50.00	-1	75.00	-18	100.0	-18
2-Chlorotoluene			0.500	0	2.000	16	5.000	17	10.00	6	20.00	3	50.00	-5	75.00	-18	100.0	-21
4-Chlorotoluene			0.500	-2	2.000	11	5.000	11	10.00	6	20.00	1	50.00	-3	75.00	-13	100.0	-11
tert-Butylbenzene			0.500	-16	2.000	13	5.000	16	10.00	9	20.00	-3	50.00	2	75.00	-15	100.0	-5
1,2,4-Trimethylbenzene			0.500	-4	2.000	5	5.000	11	10.00	4	20.00	-1	50.00	0	75.00	-10	100.0	-6
sec-Butylbenzene			0.500	-14	2.000	14	5.000	15	10.00	13	20.00	-5	50.00	3	75.00	-18	100.0	-8
para-Isopropyl Toluene	0.250	9	0.500	-9	2.000	-30	5.000	18	10.00	14	20.00	0	50.00	8	75.00	-11	100.0	1
1,3-Dichlorobenzene			0.500	0	2.000	7	5.000	11	10.00	3	20.00	2	50.00	-2	75.00	-11	100.0	-9
1,4-Dichlorobenzene			0.500	10	2.000	8	5.000	9	10.00	-1	20.00	1	50.00	-4	75.00	-11	100.0	-12
n-Butylbenzene			0.500	-10	2.000	9	5.000	9	10.00	10	20.00	-8	50.00	3	75.00	-14	100.0	0
1,2-Dichlorobenzene			0.500	-1	2.000	7	5.000	7	10.00	0	20.00	2	50.00	-2	75.00	-7	100.0	-6
1,2-Dibromo-3-Chloropropane			0.500	-1	2.000	-14	5.000	-8	10.00	-2	20.00	1	50.00	7	75.00	7	100.0	9
1,2,4-Trichlorobenzene			0.500	2	2.000	-8	5.000	1	10.00	-2	20.00	-7	50.00	3	75.00	-1	100.0	13
Hexachlorobutadiene			0.500	-1	2.000	-5	5.000	10	10.00	1	20.00	-8	50.00	2	75.00	-15	100.0	15
Naphthalene			0.500	-4	2.000	-6	5.000	-2	10.00	-1	20.00	-1	50.00	4	75.00	2	100.0	8
1,2,3-Trichlorobenzene			0.500	-2	2.000	-6	5.000	-5	10.00	-4	20.00	-2	50.00	5	75.00	2	100.0	12
Dibromofluoromethane	50.00	-3	50.00	-1	50.00	1	50.00	1	50.00	2	50.00	0	50.00	1	50.00	1	50.00	0
1,2-Dichloroethane-d4	50.00	3	50.00	3	50.00	3	50.00	4	50.00	2	50.00	0	50.00	-2	50.00	-6	50.00	-8
Toluene-d8	50.00	-2	50.00	0	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	1	50.00	0	50.00	1
Bromofluorobenzene	50.00	-1	50.00	0	50.00	-1	50.00	1	50.00	2	50.00	2	50.00	1	50.00	-1	50.00	-4

BO 08/10/09 : All manual integrations made due to fronting/tailing of peaks, combining split peaks, separating from co-eluting peaks, or fixing baseline.

LW 08/10/09 [Acetone]: Does not meet minimum RF criteria for 8260C

LW 08/10/09 [Trichloroethene]: Does not meet minimum RF criteria for 8260C

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 479315844001 Cal Date : 07-AUG-2009 Type : WATER

ICV 479315844021 (hh721 07-AUG-2009) stds: S12589 (10000X), S12587 (10000X), S12258 (10000X), S12562 (5000X)
ICV 479320168007 (hha07 10-AUG-2009) stds: S12672 (10000X), S12562 (5000X)

Analyte	ICV Seqnum	Date	Spiked	Quant	Units	%D	Max	Flags
Freon 12	479320168007	10-AUG-2009	25.00	21.93	ug/L	-12	25	m
Chloromethane	479320168007	10-AUG-2009	25.00	22.84	ug/L	-9	25	
Vinyl Chloride	479320168007	10-AUG-2009	25.00	25.48	ug/L	2	25	m
Bromomethane	479320168007	10-AUG-2009	25.00	18.79	ug/L	**-25**	25	m
Chloroethane	479320168007	10-AUG-2009	25.00	23.42	ug/L	-6	25	m
Trichlorofluoromethane	479320168007	10-AUG-2009	25.00	25.06	ug/L	0	25	
Acetone	479315844021	07-AUG-2009	25.00	23.70	ug/L	-5	25	
1,1-Dichloroethene	479315844021	07-AUG-2009	25.00	28.88	ug/L	16	25	
Iodomethane	479315844021	07-AUG-2009	25.00	13.01	ug/L	**-48**	25	v-
Methylene Chloride	479315844021	07-AUG-2009	25.00	25.48	ug/L	2	25	
Carbon Disulfide	479315844021	07-AUG-2009	25.00	26.74	ug/L	7	25	
MTBE	479315844021	07-AUG-2009	25.00	25.94	ug/L	4	25	
trans-1,2-Dichloroethene	479315844021	07-AUG-2009	25.00	28.32	ug/L	13	25	
Vinyl Acetate	479315844021	07-AUG-2009	25.00	25.80	ug/L	3	25	
1,1-Dichloroethane	479315844021	07-AUG-2009	25.00	27.94	ug/L	12	25	
2-Butanone	479315844021	07-AUG-2009	25.00	26.33	ug/L	5	25	
2,2-Dichloropropane	479315844021	07-AUG-2009	25.00	28.54	ug/L	14	25	
cis-1,2-Dichloroethene	479315844021	07-AUG-2009	25.00	27.33	ug/L	9	25	
Chloroform	479315844021	07-AUG-2009	25.00	27.15	ug/L	9	25	
Bromochloromethane	479315844021	07-AUG-2009	25.00	28.25	ug/L	13	25	
1,1,1-Trichloroethane	479315844021	07-AUG-2009	25.00	29.15	ug/L	17	25	
1,1-Dichloropropene	479315844021	07-AUG-2009	25.00	29.50	ug/L	18	25	
Carbon Tetrachloride	479315844021	07-AUG-2009	25.00	30.19	ug/L	**21**	25	
1,2-Dichloroethane	479315844021	07-AUG-2009	25.00	29.11	ug/L	16	25	
Benzene	479315844021	07-AUG-2009	25.00	28.41	ug/L	14	25	
Trichloroethene	479315844021	07-AUG-2009	25.00	27.98	ug/L	12	25	
1,2-Dichloropropane	479315844021	07-AUG-2009	25.00	27.76	ug/L	11	25	
Bromodichloromethane	479315844021	07-AUG-2009	25.00	29.28	ug/L	17	25	
Dibromomethane	479315844021	07-AUG-2009	25.00	28.35	ug/L	13	25	
4-Methyl-2-Pentanone	479315844021	07-AUG-2009	25.00	28.39	ug/L	14	25	
cis-1,3-Dichloropropene	479315844021	07-AUG-2009	25.00	30.38	ug/L	**22**	25	
Toluene	479315844021	07-AUG-2009	25.00	28.06	ug/L	12	25	
trans-1,3-Dichloropropene	479315844021	07-AUG-2009	25.00	27.28	ug/L	9	25	
1,1,2-Trichloroethane	479315844021	07-AUG-2009	25.00	29.07	ug/L	16	25	
2-Hexanone	479315844021	07-AUG-2009	25.00	28.02	ug/L	12	25	
1,3-Dichloropropane	479315844021	07-AUG-2009	25.00	29.39	ug/L	18	25	
Tetrachloroethene	479315844021	07-AUG-2009	25.00	28.09	ug/L	12	25	
Dibromochloromethane	479315844021	07-AUG-2009	25.00	28.93	ug/L	16	25	
1,2-Dibromoethane	479315844021	07-AUG-2009	25.00	28.18	ug/L	13	25	
Chlorobenzene	479315844021	07-AUG-2009	25.00	27.20	ug/L	9	25	
1,1,1,2-Tetrachloroethane	479315844021	07-AUG-2009	25.00	27.95	ug/L	12	25	
Ethylbenzene	479315844021	07-AUG-2009	25.00	28.72	ug/L	15	25	
m,p-Xylenes	479315844021	07-AUG-2009	50.00	57.17	ug/L	14	25	
o-Xylene	479315844021	07-AUG-2009	25.00	28.53	ug/L	14	25	
Styrene	479315844021	07-AUG-2009	25.00	28.91	ug/L	16	25	
Bromoform	479315844021	07-AUG-2009	25.00	28.53	ug/L	14	25	
Isopropylbenzene	479315844021	07-AUG-2009	25.00	25.23	ug/L	1	25	

Analyte	ICV Seqnum	Date	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	479315844021	07-AUG-2009	25.00	27.99	ug/L	12	25	
1,2,3-Trichloropropane	479315844021	07-AUG-2009	25.00	27.32	ug/L	9	25	
Propylbenzene	479315844021	07-AUG-2009	25.00	28.28	ug/L	13	25	
Bromobenzene	479315844021	07-AUG-2009	25.00	28.67	ug/L	15	25	
1,3,5-Trimethylbenzene	479315844021	07-AUG-2009	25.00	29.04	ug/L	16	25	
2-Chlorotoluene	479315844021	07-AUG-2009	25.00	28.50	ug/L	14	25	
4-Chlorotoluene	479315844021	07-AUG-2009	25.00	27.65	ug/L	11	25	
tert-Butylbenzene	479315844021	07-AUG-2009	25.00	28.76	ug/L	15	25	
1,2,4-Trimethylbenzene	479315844021	07-AUG-2009	25.00	28.36	ug/L	13	25	
sec-Butylbenzene	479315844021	07-AUG-2009	25.00	29.41	ug/L	18	25	
para-Isopropyl Toluene	479315844021	07-AUG-2009	25.00	29.04	ug/L	16	25	
1,3-Dichlorobenzene	479315844021	07-AUG-2009	25.00	27.25	ug/L	9	25	
1,4-Dichlorobenzene	479315844021	07-AUG-2009	25.00	27.04	ug/L	8	25	
n-Butylbenzene	479315844021	07-AUG-2009	25.00	28.82	ug/L	15	25	
1,2-Dichlorobenzene	479315844021	07-AUG-2009	25.00	27.35	ug/L	9	25	
1,2-Dibromo-3-Chloropropane	479315844021	07-AUG-2009	25.00	28.61	ug/L	14	25	
1,2,4-Trichlorobenzene	479315844021	07-AUG-2009	25.00	27.31	ug/L	9	25	
Hexachlorobutadiene	479315844021	07-AUG-2009	25.00	28.19	ug/L	13	25	
Naphthalene	479315844021	07-AUG-2009	25.00	27.94	ug/L	12	25	
1,2,3-Trichlorobenzene	479315844021	07-AUG-2009	25.00	28.12	ug/L	12	25	

-=low bias m=manual integration v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA08 IDF : 1.0
Seqnum : 479386455003.1 File : hip03 Time : 25-SEP-2009 09:38
Cal : 479315844001 Caldate : 07-AUG-2009 Caltype : WATER
Standards: S12998 (20000X), S12773 (20000X), S12565 (40000X), S12929 (20000X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3705	0.3294	25.00	22.23	ug/L	-11	20	0.0500	m
Chloromethane	0.3570	0.3738	25.00	26.18	ug/L	5	20	0.1000	
Vinyl Chloride	0.3158	0.3529	25.00	27.93	ug/L	12	20	0.0500	
Bromomethane	0.1981	0.1025	25.00	12.93	ug/L	**-48**	20	0.0500	c- m ***
Chloroethane	0.1735	0.1701	25.00	24.50	ug/L	-2	20	0.0500	m
Trichlorofluoromethane	0.3259	0.3388	25.00	25.99	ug/L	4	20	0.0500	
Acetone	0.0906	0.1047	25.00	28.90	ug/L	16	20	0.0500	
1,1-Dichloroethene	0.2178	0.2173	25.00	24.94	ug/L	0	20	0.0500	
Iodomethane	0.2078	0.0779	25.00	9.372	ug/L	**-63**	20	0.0500	c- ***
Methylene Chloride	0.3199	0.2775	25.00	21.69	ug/L	-13	20	0.0500	
Carbon Disulfide	0.8574	0.9961	25.00	29.04	ug/L	16	20	0.0500	
MTBE	0.7092	0.7594	25.00	26.77	ug/L	7	20	0.0500	
trans-1,2-Dichloroethene	0.2601	0.2608	25.00	25.07	ug/L	0	20	0.0500	
Vinyl Acetate	0.2929	0.6824	25.00	58.25	ug/L	**133**	20	0.0500	c+ rsd ***
1,1-Dichloroethane	0.4429	0.4717	25.00	26.63	ug/L	7	20	0.1000	
2-Butanone	0.1077	0.1443	25.00	33.49	ug/L	**34**	20	0.0500	c+ ***
2,2-Dichloropropane	0.2755	0.3755	25.00	34.07	ug/L	**36**	20	0.0500	c+ ***
cis-1,2-Dichloroethene	0.2873	0.2794	25.00	24.31	ug/L	-3	20	0.0500	
Chloroform	0.4593	0.4416	25.00	24.04	ug/L	-4	20	0.0500	
Bromochloromethane	0.1439	0.1452	25.00	25.21	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.3202	0.3498	25.00	27.32	ug/L	9	20	0.0500	
1,1-Dichloropropene	0.2350	0.2622	25.00	27.89	ug/L	12	20	0.0500	
Carbon Tetrachloride	0.1834	0.2109	25.00	28.74	ug/L	15	20	0.0500	
1,2-Dichloroethane	0.2243	0.2577	25.00	28.73	ug/L	15	20	0.0500	
Benzene	0.6732	0.6939	25.00	25.77	ug/L	3	20	0.0500	
Trichloroethene	0.1871	0.1863	25.00	24.90	ug/L	0	20	0.0500	
1,2-Dichloropropane	0.1775	0.1958	25.00	27.59	ug/L	10	20	0.0500	
Bromodichloromethane	0.2407	0.2524	25.00	26.21	ug/L	5	20	0.0500	
Dibromomethane	0.1329	0.1374	25.00	25.85	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.1545	0.2254	25.00	36.48	ug/L	**46**	20	0.0500	c+ ***
cis-1,3-Dichloropropene	0.2700	0.2955	25.00	27.36	ug/L	9	20	0.0500	
Toluene	0.5354	0.5186	25.00	24.22	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.3161	0.3364	25.00	26.60	ug/L	6	20	0.0500	
1,1,2-Trichloroethane	0.1168	0.1144	25.00	24.49	ug/L	-2	20	0.0500	
2-Hexanone	0.1342	0.1781	25.00	33.19	ug/L	**33**	20	0.0500	c+ ***
1,3-Dichloropropane	0.3457	0.3402	25.00	24.60	ug/L	-2	20	0.0500	
Tetrachloroethene	0.2303	0.2269	25.00	24.64	ug/L	-1	20	0.0500	
Dibromochloromethane	0.2347	0.2212	25.00	23.56	ug/L	-6	20	0.0500	
1,2-Dibromoethane	0.2197	0.2202	25.00	25.06	ug/L	0	20	0.0500	
Chlorobenzene	0.5775	0.5599	25.00	24.24	ug/L	-3	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2098	0.2004	25.00	23.88	ug/L	-4	20	0.0500	
Ethylbenzene	0.9830	0.9650	25.00	24.54	ug/L	-2	20	0.0500	
m,p-Xylenes	0.3543	0.3621	50.00	51.09	ug/L	2	20	0.0500	
o-Xylene	0.3588	0.3592	25.00	25.03	ug/L	0	20	0.0500	
Styrene	0.6039	0.6084	25.00	25.19	ug/L	1	20	0.0500	
Bromoform	0.1686	0.1360	25.00	20.17	ug/L	-19	20	0.1000	
Isopropylbenzene	1.5380	1.5259	25.00	24.80	ug/L	-1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.4709	0.4644	25.00	24.66	ug/L	-1	20	0.3000	
1,2,3-Trichloropropane	0.1240	0.1205	25.00	24.29	ug/L	-3	20	0.0500	
Propylbenzene	1.9011	1.8280	25.00	24.04	ug/L	-4	20	0.0500	
Bromobenzene	0.4834	0.4556	25.00	23.56	ug/L	-6	20	0.0500	
1,3,5-Trimethylbenzene	1.1415	1.1435	25.00	25.04	ug/L	0	20	0.0500	
2-Chlorotoluene	1.2813	1.2186	25.00	23.78	ug/L	-5	20	0.0500	
4-Chlorotoluene	1.2212	1.1543	25.00	23.63	ug/L	-5	20	0.0500	
tert-Butylbenzene	0.9690	0.9967	25.00	25.71	ug/L	3	20	0.0500	
1,2,4-Trimethylbenzene	1.1014	1.0883	25.00	24.70	ug/L	-1	20	0.0500	
sec-Butylbenzene	1.3833	1.4293	25.00	25.83	ug/L	3	20	0.0500	
para-Isopropyl Toluene	1.0126	1.1265	25.00	27.81	ug/L	11	20	0.0500	
1,3-Dichlorobenzene	0.8009	0.7463	25.00	23.30	ug/L	-7	20	0.0500	
1,4-Dichlorobenzene	0.8088	0.7521	25.00	23.25	ug/L	-7	20	0.0500	
n-Butylbenzene	0.8862	0.9178	25.00	25.89	ug/L	4	20	0.0500	
1,2-Dichlorobenzene	0.7684	0.7138	25.00	23.22	ug/L	-7	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0770	0.0742	25.00	24.09	ug/L	-4	20	0.0500	
1,2,4-Trichlorobenzene	0.2555	0.2736	25.00	26.77	ug/L	7	20	0.0500	
Hexachlorobutadiene	0.0786	0.1106	25.00	35.18	ug/L	**41**	20	0.0500	c+ ***
Naphthalene	0.6922	0.7513	25.00	27.14	ug/L	9	20	0.0500	
1,2,3-Trichlorobenzene	0.2391	0.2407	25.00	25.17	ug/L	1	20	0.0500	
Dibromofluoromethane	0.5241	0.5494	50.00	52.41	ug/L	5	20	0.0500	
1,2-Dichloroethane-d4	0.3282	0.3760	50.00	57.27	ug/L	15	20	0.0500	
Toluene-d8	1.2524	1.2763	50.00	50.95	ug/L	2	20	0.0500	
Bromofluorobenzene	0.8711	0.8909	50.00	51.14	ug/L	2	20	0.0500	

ISTD (ICAL hh717)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	3906633	4176955	6.92	10.15	10.15	0.00
1,4-Difluorobenzene	5415536	5712526	5.48	11.27	11.26	-0.01
Chlorobenzene-d5	4238599	4737163	11.76	15.29	15.29	0.00
1,4-Dichlorobenzene-d4	2330596	2747596	17.89	18.00	17.99	-0.01

MJD 09/25/09 [Chloroethane]: Combined split peak . [general version]

MJD 09/25/09 [Freon 12]: Combined split peak . [general version]

MJD 09/25/09 [Bromomethane]: Combined split peak . [general version]

Analyst: DNT Date: 09/28/09 Reviewer: LW Date: 09/29/09

+=high bias -=low bias c=CCV m=manual integration rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : 20PPB IDF : 1.0
Seqnum : 839384947004.1 File : kio04 Time : 24-SEP-2009 08:35
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12998 (25000X), S12773 (25000X), S12217 (50000X), S12929 (25000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5606	20.00	20.94	ug/L	5	20	0.0500	
Chloromethane	0.5160	0.4682	20.00	18.15	ug/L	-9	20	0.1000	
Vinyl Chloride	0.5175	0.5437	20.00	21.01	ug/L	5	20	0.0500	
Bromomethane	0.2608	0.2378	20.00	18.23	ug/L	-9	20	0.0500	
Chloroethane	0.4094	0.4106	20.00	20.06	ug/L	0	20	0.0500	
Trichlorofluoromethane	0.7415	0.7074	20.00	19.08	ug/L	-5	20	0.0500	
Acetone	0.1382	0.1313	20.00	19.00	ug/L	-5	20	0.0500	
1,1-Dichloroethene	0.3747	0.3961	20.00	21.14	ug/L	6	20	0.0500	
Iodomethane	0.2599	0.1715	20.00	14.36	ug/L	**-28**	20	0.0500	c- ***
Methylene Chloride	0.5280	0.5328	20.00	20.18	ug/L	1	20	0.0500	
Carbon Disulfide	1.4090	1.7365	20.00	24.65	ug/L	**23**	20	0.0500	c+ ***
MTBE	1.5447	1.6153	20.00	20.91	ug/L	5	20	0.0500	
trans-1,2-Dichloroethene	0.4564	0.4920	20.00	21.56	ug/L	8	20	0.0500	
Vinyl Acetate	0.9726	0.9666	20.00	19.87	ug/L	-1	20	0.0500	
1,1-Dichloroethane	0.9405	1.0020	20.00	21.31	ug/L	7	20	0.1000	
2-Butanone	0.2331	0.2247	20.00	19.28	ug/L	-4	20	0.0500	
2,2-Dichloropropane	0.7134	0.7830	20.00	21.95	ug/L	10	20	0.0500	
cis-1,2-Dichloroethene	0.5440	0.5687	20.00	20.90	ug/L	5	20	0.0500	
Chloroform	0.9238	0.8918	20.00	19.31	ug/L	-3	20	0.0500	
Bromochloromethane	0.2354	0.2479	20.00	21.06	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7032	0.7334	20.00	20.86	ug/L	4	20	0.0500	
1,1-Dichloropropene	0.4217	0.4092	20.00	19.41	ug/L	-3	20	0.0500	
Carbon Tetrachloride	0.3483	0.3245	20.00	18.63	ug/L	-7	20	0.0500	
1,2-Dichloroethane	0.4392	0.3850	20.00	17.53	ug/L	-12	20	0.0500	
Benzene	1.3404	1.3431	20.00	20.04	ug/L	0	20	0.0500	
Trichloroethene	0.3158	0.3120	20.00	19.76	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3595	0.3460	20.00	19.25	ug/L	-4	20	0.0500	
Bromodichloromethane	0.3863	0.3601	20.00	18.64	ug/L	-7	20	0.0500	
Dibromomethane	0.1802	0.1684	20.00	18.69	ug/L	-7	20	0.0500	
4-Methyl-2-Pentanone	0.3044	0.2467	20.00	16.21	ug/L	-19	20	0.0500	
cis-1,3-Dichloropropene	0.5168	0.5032	20.00	19.47	ug/L	-3	20	0.0500	
Toluene	0.9593	0.9012	20.00	18.79	ug/L	-6	20	0.0500	
trans-1,3-Dichloropropene	0.5730	0.5235	20.00	18.27	ug/L	-9	20	0.0500	
1,1,2-Trichloroethane	0.1749	0.1638	20.00	18.73	ug/L	-6	20	0.0500	
2-Hexanone	0.2445	0.1759	20.00	14.39	ug/L	**-28**	20	0.0500	c- ***
1,3-Dichloropropane	0.6133	0.5711	20.00	18.62	ug/L	-7	20	0.0500	
Tetrachloroethene	0.3329	0.2956	20.00	17.76	ug/L	-11	20	0.0500	
Dibromochloromethane	0.3027	0.2666	20.00	17.61	ug/L	-12	20	0.0500	
1,2-Dibromoethane	0.3049	0.2764	20.00	18.13	ug/L	-9	20	0.0500	
Chlorobenzene	1.0519	0.9667	20.00	18.38	ug/L	-8	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3358	0.3010	20.00	17.93	ug/L	-10	20	0.0500	
Ethylbenzene	1.8115	1.6984	20.00	18.75	ug/L	-6	20	0.0500	
m,p-Xylenes	0.6304	0.5826	40.00	36.97	ug/L	-8	20	0.0500	
o-Xylene	0.6283	0.5592	20.00	17.80	ug/L	-11	20	0.0500	
Styrene	1.0367	0.9263	20.00	17.87	ug/L	-11	20	0.0500	
Bromoform	0.1849	0.1728	20.00	16.56	ug/L	-17	20	0.1000	
Isopropylbenzene	3.8595	3.9015	20.00	20.22	ug/L	1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9033	20.00	18.84	ug/L	-6	20	0.3000	
1,2,3-Trichloropropane	1.0234	1.0642	20.00	20.80	ug/L	4	20	0.0500	
Propylbenzene	3.9448	3.7339	20.00	18.93	ug/L	-5	20	0.0500	
Bromobenzene	1.0220	0.9942	20.00	19.46	ug/L	-3	20	0.0500	
1,3,5-Trimethylbenzene	2.7424	2.8391	20.00	20.71	ug/L	4	20	0.0500	
2-Chlorotoluene	3.1099	3.1575	20.00	20.31	ug/L	2	20	0.0500	
4-Chlorotoluene	2.6572	2.5853	20.00	19.46	ug/L	-3	20	0.0500	
tert-Butylbenzene	2.1712	1.8204	20.00	16.77	ug/L	-16	20	0.0500	
1,2,4-Trimethylbenzene	2.6384	2.7441	20.00	20.80	ug/L	4	20	0.0500	
sec-Butylbenzene	3.1284	2.6670	20.00	17.05	ug/L	-15	20	0.0500	
para-Isopropyl Toluene	2.4941	2.3643	20.00	18.96	ug/L	-5	20	0.0500	
1,3-Dichlorobenzene	1.6902	1.5907	20.00	18.82	ug/L	-6	20	0.0500	
1,4-Dichlorobenzene	1.6542	1.4979	20.00	18.11	ug/L	-9	20	0.0500	
n-Butylbenzene	2.4331	2.4949	20.00	23.23	ug/L	16	20	0.0500	
1,2-Dichlorobenzene	1.6119	1.5164	20.00	18.82	ug/L	-6	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1759	0.1530	20.00	17.40	ug/L	-13	20	0.0500	
1,2,4-Trichlorobenzene	1.0876	1.0272	20.00	18.89	ug/L	-6	20	0.0500	
Hexachlorobutadiene	0.4373	0.3685	20.00	16.85	ug/L	-16	20	0.0500	
Naphthalene	2.7279	2.6829	20.00	19.67	ug/L	-2	20	0.0500	
1,2,3-Trichlorobenzene	1.0079	0.9464	20.00	18.78	ug/L	-6	20	0.0500	
Dibromofluoromethane	0.4472	0.4681	50.00	52.34	ug/L	5	20	0.0500	
1,2-Dichloroethane-d4	0.3737	0.3401	50.00	45.50	ug/L	-9	20	0.0500	
Toluene-d8	1.4811	1.5309	50.00	51.68	ug/L	3	20	0.0500	
Bromofluorobenzene	1.2424	1.3371	50.00	53.81	ug/L	8	20	0.0500	

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2023195	34.40	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3626419	48.20	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3229199	51.17	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1169850	18.95	17.10	17.10	0.00

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214923 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513643 IDF : 1.0
Seqnum : 839386393008.4 File : kip08 Time : 25-SEP-2009 10:31
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.7023	25.00	32.79	ug/L	**31**	20	0.0500	c+ u ***
Chloromethane	0.5160	0.5820	25.00	28.19	ug/L	13	20	0.1000	u
Vinyl Chloride	0.5175	0.6171	25.00	29.81	ug/L	19	20	0.0500	u
Bromomethane	0.2608	0.3405	25.00	32.65	ug/L	**31**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4710	25.00	28.76	ug/L	15	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8096	25.00	27.30	ug/L	9	20	0.0500	u
Iodomethane	0.2599	0.3862	25.00	35.57	ug/L	**42**	20	0.0500	c+ u ***
Acetone	0.1382	0.1496	25.00	27.07	ug/L	8	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4193	25.00	27.97	ug/L	12	20	0.0500	u
Methylene Chloride	0.5280	0.5922	25.00	28.04	ug/L	12	20	0.0500	u
Carbon Disulfide	1.4090	1.5022	25.00	26.65	ug/L	7	20	0.0500	u
MTBE	1.5447	1.6190	25.00	26.20	ug/L	5	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5462	25.00	29.92	ug/L	20	20	0.0500	u
Vinyl Acetate	0.9726	0.9039	25.00	23.23	ug/L	-7	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0455	25.00	27.79	ug/L	11	20	0.1000	u
2-Butanone	0.2331	0.2372	25.00	25.44	ug/L	2	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6218	25.00	28.57	ug/L	14	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7917	25.00	27.74	ug/L	11	20	0.0500	u
Chloroform	0.9238	0.9545	25.00	25.83	ug/L	3	20	0.0500	u
Bromochloromethane	0.2354	0.2663	25.00	28.27	ug/L	13	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7373	25.00	26.21	ug/L	5	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4289	25.00	25.43	ug/L	2	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3288	25.00	23.59	ug/L	-6	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4044	25.00	23.02	ug/L	-8	20	0.0500	u
Benzene	1.3404	1.4552	25.00	27.14	ug/L	9	20	0.0500	u
Trichloroethene	0.3158	0.3385	25.00	26.80	ug/L	7	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3702	25.00	25.75	ug/L	3	20	0.0500	u
Bromodichloromethane	0.3863	0.3954	25.00	25.59	ug/L	2	20	0.0500	u
Dibromomethane	0.1802	0.1825	25.00	25.33	ug/L	1	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2629	25.00	21.59	ug/L	-14	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5727	25.00	27.70	ug/L	11	20	0.0500	u
Toluene	0.9593	0.9748	25.00	25.40	ug/L	2	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5338	25.00	23.29	ug/L	-7	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1795	25.00	25.65	ug/L	3	20	0.0500	u
2-Hexanone	0.2445	0.2126	25.00	21.73	ug/L	-13	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6241	25.00	25.44	ug/L	2	20	0.0500	u
Tetrachloroethene	0.3329	0.3131	25.00	23.52	ug/L	-6	20	0.0500	u
Dibromochloromethane	0.3027	0.2969	25.00	24.52	ug/L	-2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3059	25.00	25.08	ug/L	0	20	0.0500	u
Chlorobenzene	1.0519	1.0573	25.00	25.13	ug/L	1	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3248	25.00	24.18	ug/L	-3	20	0.0500	u
Ethylbenzene	1.8115	1.8631	25.00	25.71	ug/L	3	20	0.0500	u
m,p-Xylenes	0.6304	0.6492	50.00	51.49	ug/L	3	20	0.0500	u
o-Xylene	0.6283	0.6247	25.00	24.86	ug/L	-1	20	0.0500	u
Styrene	1.0367	1.0737	25.00	25.89	ug/L	4	20	0.0500	u
Bromoform	0.1849	0.1942	25.00	22.75	ug/L	-9	20	0.1000	u
Isopropylbenzene	3.8595	3.7225	25.00	24.11	ug/L	-4	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9682	25.00	25.25	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1592	25.00	28.32	ug/L	13	20	0.0500	u
Propylbenzene	3.9448	4.0402	25.00	25.60	ug/L	2	20	0.0500	u
Bromobenzene	1.0220	1.0904	25.00	26.67	ug/L	7	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.0924	25.00	28.19	ug/L	13	20	0.0500	u
2-Chlorotoluene	3.1099	3.4796	25.00	27.97	ug/L	12	20	0.0500	u
4-Chlorotoluene	2.6572	2.8402	25.00	26.72	ug/L	7	20	0.0500	u
tert-Butylbenzene	2.1712	1.9832	25.00	22.84	ug/L	-9	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.0381	25.00	28.79	ug/L	15	20	0.0500	u
sec-Butylbenzene	3.1284	2.8363	25.00	22.67	ug/L	-9	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.4523	25.00	24.58	ug/L	-2	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.7399	25.00	25.74	ug/L	3	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6579	25.00	25.06	ug/L	0	20	0.0500	u
n-Butylbenzene	2.4331	2.7417	25.00	35.59	ug/L	**42**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6616	25.00	25.77	ug/L	3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1762	25.00	25.05	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.1308	25.00	25.99	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3796	25.00	21.70	ug/L	-13	20	0.0500	u
Naphthalene	2.7279	3.1829	25.00	29.17	ug/L	17	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	1.0957	25.00	27.18	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.4472	0.4644	50.00	51.92	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3362	50.00	44.98	ug/L	-10	20	0.0500	u
Toluene-d8	1.4811	1.5250	50.00	51.48	ug/L	3	20	0.0500	u
Bromofluorobenzene	1.2424	1.3301	50.00	53.53	ug/L	7	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2278668	51.38	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	4073965	66.49	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3650497	70.89	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1325276	34.76	17.10	17.10	0.00

BO 09/25/09 : STD ID fixed in LIMS [general version]

BO 09/25/09 : Changed type in LIMS [general version]

Analyst: DNT Date: 09/28/09 Reviewer: LW Date: 09/29/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 479386455

Date : 09/25/09 Reference : hh717
Sequence : MSVOA08 hip Analyzed : 08/07/09 17:09

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	3906633	10.15	5415536	11.27	4238599	15.29	2330596	18.00
		LOWER LIMIT	1953317	9.65	2707768	10.77	2119300	14.79	1165298	17.50
		UPPER LIMIT	7813266	10.65	10831072	11.77	8477198	15.79	4661192	18.50
003	CCV		4176955	10.15	5712526	11.26	4737163	15.29	2747596	17.99
004	BS	QC513638	4204247	10.15	5939392	11.26	4791518	15.29	2744998	17.99
005	BSD	QC513639	4267622	10.14	6039653	11.26	4889735	15.28	2764415	17.99
007	BLANK	QC513637	4247592	10.15	5888584	11.26	4815136	15.29	2667625	17.99
008	SAMPLE	214923-009	4133440	10.15	5915827	11.27	4713224	15.28	2618264	17.99
009	MS	QC513533	4111375	10.15	5823376	11.26	4654254	15.29	2666392	17.99
010	MSD	QC513534	4306201	10.15	6021859	11.26	4784545	15.29	2768371	17.99
013	CCV		4426215	10.15	6206273	11.26	4890898	15.29	2851433	17.99
014	CCV/BS	QC513640	4393570	10.14	6235084	11.26	4936425	15.28	2794134	17.99
015	BSD	QC513641	3925149	10.15	5640549	11.26	4506082	15.29	2529137	17.99
017	BLANK	QC513642	4201095	10.15	5927852	11.27	4780445	15.28	2655638	17.99
018	SAMPLE	215123-001	4215247	10.15	5956644	11.27	4839396	15.29	2645313	17.99
019	SAMPLE	215125-001	4166497	10.15	5931999	11.26	4796182	15.29	2684794	18.00
020	SAMPLE	215092-001	4171132	10.15	5998082	11.26	4800491	15.29	2675298	17.99
021	SAMPLE	215092-002	4185875	10.15	6000833	11.27	4810032	15.28	2688946	17.99
022	SAMPLE	215092-003	3898867	10.15	5613709	11.26	4530446	15.28	2456933	18.00
023	SAMPLE	215092-004	4158303	10.15	5977838	11.27	4737187	15.29	2612161	17.99
024	SAMPLE	215092-005	4145013	10.15	5944504	11.26	4779928	15.28	2629632	18.00
025	SAMPLE	215092-006	4205790	10.15	6076004	11.26	4828912	15.29	2603858	17.99
026	SAMPLE	215085-001	4205781	10.15	6029869	11.26	4852026	15.29	2672787	17.99
027	SAMPLE	215085-002	4158187	10.15	6038947	11.27	4801969	15.29	2657444	17.99
028	SAMPLE	215101-002	4247361	10.15	6140653	11.27	4913673	15.28	2688005	17.99
029	SAMPLE	215091-001	4118600	10.15	6030345	11.27	4836602	15.28	2649873	17.99
030	SAMPLE	215101-001	4110294	10.15	5917219	11.27	4781884	15.29	2650616	17.99
031	SAMPLE	215085-003	4115789	10.15	6006690	11.26	4804390	15.29	2640602	17.99

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839384947

Date : 09/24/09 Reference : kif12
Sequence : MSVOA11 kio Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
004	CCV	20PPB	2023195	10.81	3626419	11.74	3229199	14.82	1169850	17.10
005	LCS	QC513420	2112696	10.81	3768449	11.74	3368802	14.82	1210453	17.10
007	BLANK	QC513421	2025084	10.81	3680944	11.74	3203631	14.82	908846	17.10
008	SAMPLE	214846-004	1992125	10.81	3621127	11.74	3128023	14.82	874752	17.10
009	SAMPLE	214923-001	1960707	10.81	3595872	11.74	3134551	14.82	915798	17.10
010	SAMPLE	214925-001	1937366	10.81	3518440	11.74	3052949	14.82	910466	17.10
011	SAMPLE	214925-002	1890776	10.81	3452739	11.74	3021064	14.82	890627	17.10
012	SAMPLE	214925-003	1895761	10.81	3472412	11.74	3042141	14.82	889331	17.10
013	SAMPLE	214851-007	1853075	10.81	3375729	11.74	2944011	14.82	833705	17.10
014	MSS	214851-009	1815418	10.81	3338931	11.74	2907777	14.82	803281	17.10
015	SAMPLE	214851-014	1776925	10.81	3284359	11.74	2836894	14.83	707819	17.10
016	SAMPLE	214851-015	1765596	10.81	3232591	11.74	2839598	14.82	862721	17.10
017	SAMPLE	214851-016	1748290	10.81	3207825	11.74	2819199	14.82	800539	17.10
018	SAMPLE	214851-017	1764402	10.81	3240786	11.74	2833372	14.82	835162	17.10
019	SAMPLE	214923-002	1747667	10.81	3222900	11.74	2824539	14.82	792718	17.10
020	SAMPLE	214923-003	1741349	10.81	3200791	11.74	2808524	14.82	848812	17.10
021	SAMPLE	214923-004	1701028	10.81	3140747	11.74	2771128	14.82	834747	17.10
022	SAMPLE	214923-006	1727967	10.81	3177999	11.74	2796076	14.82	809481	17.10
023	SAMPLE	214923-007	1683834	10.81	3140994	11.74	2732858	14.83	729121	17.10
024	SAMPLE	214923-008	1695791	10.81	3134514	11.74	2779820	14.82	810886	17.10
025	SAMPLE	214923-009	1698480	10.81	3120978	11.74	2773825	14.82	804161	17.10
026	SAMPLE	214923-005	1760216	10.81	3217193	11.74	2851643	14.82	782655	17.10
027	MS	QC513430	1786851	10.81	3276571	11.74	2991541	14.82	1139354	17.10
028	MSD	QC513431	1943151	10.81	3515341	11.74	3201861	14.82	1187919	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839386393

Date : 09/25/09 Reference : kif12
Sequence : MSVOA11 kip Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
008	CCV/LCS	QC513643	2278668	10.81	4073965	11.74	3650497	14.82	1325276	17.10
010	BLANK	QC513644	2138347	10.81	3937662	11.74	3415858	14.82	958926	17.10
011	SAMPLE	215139-004	2018314	10.81	3749582	11.74	3268096	14.82	1000302	17.10
012	SAMPLE	215157-002	1980455	10.81	3642457	11.74	3162028	14.82	930269	17.10
013	SAMPLE	215157-001	1901721	10.81	3572748	11.74	3128605	14.82	896362	17.10
014	SAMPLE	214922-001	1838597	10.81	3437362	11.74	3020405	14.82	900805	17.10
015	SAMPLE	214925-004	1789307	10.81	3346398	11.74	2956684	14.82	859160	17.10
016	SAMPLE	215157-001	1720358	10.81	3248603	11.74	2884113	14.82	814849	17.10
017	SAMPLE	214925-005	1714097	10.81	3202655	11.74	2833753	14.82	816620	17.10
018	SAMPLE	214925-006	1679206	10.81	3174104	11.74	2808232	14.82	823804	17.10
019	SAMPLE	214925-007	1642883	10.81	3092650	11.74	2728575	14.82	778397	17.10
020	SAMPLE	214925-008	1603067	10.81	3037259	11.74	2690063	14.82	744797	17.10
021	SAMPLE	214925-009	1560251	10.81	2968881	11.74	2647871	14.82	763493	17.10
022	SAMPLE	214925-010	1567569	10.81	2969915	11.74	2665048	14.82	753729	17.10
023	SAMPLE	214925-011	1529818	10.81	2911865	11.74	2589974	14.82	723320	17.10
024	SAMPLE	214925-012	1542860	10.81	2929540	11.74	2627493	14.82	742552	17.10
025	MSS	214922-002	1535968	10.81	2914874	11.74	2592237	14.82	777140	17.10
026	SAMPLE	214922-003	1522637	10.81	2888654	11.74	2556105	14.82	685011	17.10
027	SAMPLE	214922-004	1520466	10.81	2893132	11.74	2599053	14.82	736897	17.10
028	SAMPLE	214922-006	1514038	10.81	2884674	11.74	2587660	14.82	754203	17.10
029	SAMPLE	214923-006	1550460	10.81	2939938	11.74	2614137	14.82	767115	17.10
030	MS	QC513653	1560235	10.81	2931781	11.74	2724706	14.82	1003949	17.10
031	MSD	QC513654	1740157	10.81	3233665	11.74	2994197	14.82	1059377	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 479315844

Instrument : MSVOA08 Begun : 08/07/09 08:04
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hh701	X	IB			08/07/09 08:04	1.0	1	
002	hh702	TUN	BFB			08/07/09 08:44	1.0	2	
003	hh703	X	IB			08/07/09 09:14	1.0	1	
004	hh704	X	CALIB IB			08/07/09 09:51	1.0	1	
005	hh705	TUN	BFB			08/07/09 10:21	1.0	2	
006	hh706	TUN	BFB			08/07/09 10:52	1.0	2	
007	hh707	TUN	BFB			08/07/09 11:20	1.0	2	
008	hh708	TUN	BFB			08/07/09 11:41	1.0	2	
009	hh709	X	IB			08/07/09 12:21	1.0	1	
010	hh710	IB	CALIB IB			08/07/09 12:57	1.0	1	
011	hh711	ICAL	0.25/0.5PPB			08/07/09 13:33	1.0	3 4 5 6 1	
012	hh712	ICAL	0.5/1PPB			08/07/09 14:09	1.0	3 4 5 6 1	
013	hh713	ICAL	2PPB			08/07/09 14:45	1.0	3 4 5 6 1	
014	hh714	ICAL	5PPB			08/07/09 15:21	1.0	3 4 5 6 1	
015	hh715	ICAL	10PPB			08/07/09 15:57	1.0	3 4 5 6 1	
016	hh716	ICAL	20PPB			08/07/09 16:33	1.0	7 8 9 10 1	
017	hh717	ICAL	50PPB			08/07/09 17:09	1.0	7 8 9 10 1	
018	hh718	ICAL	75PPB			08/07/09 17:45	1.0	7 8 9 10 1	
019	hh719	ICAL	100PPB			08/07/09 18:21	1.0	7 8 9 10 1	
020	hh720	ICV	25PPB			08/07/09 18:57	1.0	11 1	
021	hh721	ICV	25PPB			08/07/09 19:33	1.0	12 13 14 1	
022	hh722	X	IB			08/07/09 20:09	1.0	1	
023	hh723	X	IB			08/07/09 20:46	1.0	1	
024	hh724	X	IB			08/07/09 21:22	1.0	1	

BO 08/07/09 : Tune drifted, adjusted tune for hh706, hh707

BO 08/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 24.

Analyst: BO Date: 08/10/09 Reviewer: LW Date: 08/10/09

Standards used: 1=S12562 2=S12404 3=S12664 4=S12665 5=S12666 6=S12667 7=S12508 8=S12517 9=S12217 10=S12487 11=S12669 12=S12589 13=S12587 14=S12258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 479320168

Instrument : MSVOA08 Begun : 08/10/09 08:08
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hha01	X	IB			08/10/09 08:08	1.0	1	
002	hha02	X	BFB			08/10/09 08:43	1.0	2	
003	hha03	TUN	BFB			08/10/09 09:02	1.0	2	
004	hha04	CCV	20PPB			08/10/09 09:30	1.0	3 4 5 6 1	
005	hha05	X	QC506824	Water	153689	08/10/09 10:53	1.0	7 8 9 10 1	
006	hha06	X	QC506825	Water	153689	08/10/09 11:30	1.0	7 8 9 10 1	
007	hha07	ICV	25PPB			08/10/09 12:06	1.0	11 1	
008	hha08	BS	QC506824	Water	153689	08/10/09 12:42	1.0	7 8 9 10 1	
009	hha09	BSD	QC506825	Water	153689	08/10/09 13:18	1.0	7 8 9 10 1	
010	hha10	TUN	BFB			08/10/09 13:47	1.0	2	
011	hha11	CCV	20PPB			08/10/09 14:04	1.0	1 3 4 5 6	
012	hha12	X	IB			08/10/09 14:40	1.0	1	
013	hha13	BLANK	QC506826	Water	153689	08/10/09 15:16	1.0	1	
014	hha14	X	214047-007		153689	08/10/09 15:52	1.0	1	
015	hha15	SAMPLE	214044-011	Water	153689	08/10/09 16:29	1.0	1	
016	hha16	SAMPLE	214041-018	Water	153689	08/10/09 17:05	1.0	1	
017	hha17	SAMPLE	214062-005	Water	153689	08/10/09 17:41	1.0	1	
018	hha18	SAMPLE	214060-001	Water	153689	08/10/09 18:17	1.0	1	
019	hha19	SAMPLE	214063-011	Water	153689	08/10/09 18:54	1.0	1	
020	hha20	SAMPLE	214043-004	Water	153689	08/10/09 19:30	1.0	1	
021	hha21	SAMPLE	214031-002	Water	153689	08/10/09 20:06	1.0	1	
022	hha22	SAMPLE	214031-003	Water	153689	08/10/09 20:42	1.0	1	
023	hha23	SAMPLE	214047-002	Water	153689	08/10/09 21:18	1.0	1	
024	hha24	SAMPLE	214047-003	Water	153689	08/10/09 21:54	1.0	1	
025	hha25	SAMPLE	214030-013	Water	153689	08/10/09 22:30	1.0	1	
026	hha26	SAMPLE	214030-014	Water	153689	08/10/09 23:06	1.0	1	
027	hha27	SAMPLE	214031-001	Water	153689	08/10/09 23:43	5.0	1	
028	hha28	SAMPLE	214047-004	Water	153689	08/11/09 00:19	200.0	1	
029	hha29	SAMPLE	214047-006	Water	153689	08/11/09 00:55	10.0	1	
030	hha30	SAMPLE	214047-005	Water	153689	08/11/09 01:31	1429	1	
031	hha31	X	IB			08/11/09 02:07	1.0	1	
032	hha32	X	IB			08/11/09 02:43	1.0	1	
033	hha33	X	IB			08/11/09 03:19	1.0	1	

BO 08/11/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

BO 08/11/09 : Matrix spikes were not performed for this analysis in batch 153689 due to insufficient sample amount.

Analyst: BO Date: 08/11/09 Reviewer: LW Date: 08/11/09

Standards used: 1=S12562 2=S12404 3=S12508 4=S12517 5=S12217 6=S12487 7=S12589 8=S12587 9=S12693 10=S12669 11=S12672

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 479386455

Instrument : MSVOA08 Begun : 09/25/09 08:55
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hip01	X	BFB			09/25/09 08:55	1.0	1	
002	hip02	TUN	BFB			09/25/09 09:10	1.0	1	
003	hip03	CCV				09/25/09 09:38	1.0	2 3 4 5 6	
004	hip04	BS	QC513638	Water	155308	09/25/09 10:21	1.0	7 8 9 6	
005	hip05	BSD	QC513639	Water	155308	09/25/09 10:57	1.0	7 8 9 6	
006	hip06	X	IB			09/25/09 11:33	1.0	6	
007	hip07	BLANK	QC513637	Water	155308	09/25/09 12:10	1.0	6	
008	hip08	SAMPLE	214923-009	Water	155308	09/25/09 12:46	1.0	6	
009	hip09	MS	QC513533	Water	155261	09/25/09 13:23	1.0	7 8 9 6	
010	hip10	MSD	QC513534	Water	155261	09/25/09 13:59	1.0	7 8 9 6	
011	hip11	X	BFB			09/25/09 14:40	1.0	1	
012	hip12	TUN	BFB			09/25/09 14:58	1.0	1	
013	hip13	CCV				09/25/09 15:29	1.0	2 3 4 5 6	
014	hip14	CCV/BS	QC513640	Water	155308	09/25/09 16:16	1.0	10 6	
015	hip15	BSD	QC513641	Water	155308	09/25/09 16:52	1.0	10 6	
016	hip16	X	IB			09/25/09 17:28	1.0	6	
017	hip17	BLANK	QC513642	Water	155308	09/25/09 18:05	1.0	6	
018	hip18	SAMPLE	215123-001	Water	155308	09/25/09 18:41	1.0	6	
019	hip19	SAMPLE	215125-001	Water	155308	09/25/09 19:17	1.0	6	
020	hip20	SAMPLE	215092-001	Water	155308	09/25/09 19:53	1.0	6	
021	hip21	SAMPLE	215092-002	Water	155308	09/25/09 20:30	1.0	6	
022	hip22	SAMPLE	215092-003	Water	155308	09/25/09 21:06	1.0	6	
023	hip23	SAMPLE	215092-004	Water	155308	09/25/09 21:42	1.0	6	
024	hip24	SAMPLE	215092-005	Water	155308	09/25/09 22:19	1.0	6	
025	hip25	SAMPLE	215092-006	Water	155308	09/25/09 22:56	1.0	6	
026	hip26	SAMPLE	215085-001	Water	155308	09/25/09 23:32	1.0	6	1:MTBE=210
027	hip27	SAMPLE	215085-002	Water	155308	09/26/09 00:08	1.0	6	
028	hip28	SAMPLE	215101-002	Water	155308	09/26/09 00:45	1.0	6	
029	hip29	SAMPLE	215091-001	Water	155308	09/26/09 01:21	4.0	6	1:MTBE=200
030	hip30	SAMPLE	215101-001	Water	155308	09/26/09 01:58	25.0	6	
031	hip31	SAMPLE	215085-003	Water	155308	09/26/09 02:34	142.9	6	
032	hip32	X	IB			09/26/09 03:10	1.0	6	
033	hip33	X	IB			09/26/09 03:47	1.0	6	
034	hip34	X	IB			09/26/09 04:23	1.0	6	
035	hip35	X	IB			09/26/09 05:00	1.0	6	
036	hip36	X	IB			09/26/09 05:36	1.0	6	

TEW 09/26/09 : Tune was adjusted by another analyst prior to file hip01.

TEW 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 36.

TEW 09/28/09 : Matrix spikes were not performed for this analysis in batch 155308 due to insufficient sample amount.

Analyst: TEW Date: 09/28/09 Reviewer: LW Date: 09/28/09

Standards used: 1=S12404 2=S12998 3=S12773 4=S12565 5=S12929 6=S12921 7=S12996 8=S12693 9=S12923 10=S12208

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839384947

Instrument : MSVOA11 Begun : 09/24/09 07:47
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kio01	X	IB			09/24/09 07:47	1.0	1	
002	kio02	X	BFB			09/24/09 08:11	1.0	2	
003	kio03	TUN	BFB			09/24/09 08:23	1.0	2	
004	kio04	CCV	20PPB			09/24/09 08:35	1.0	3 4 5 6 1	
005	kio05	LCS	QC513420	Water	155248	09/24/09 09:13	1.0	7 8 9 10 1	
006	kio06	X	IB			09/24/09 09:41	1.0	1	
007	kio07	BLANK	QC513421	Water	155248	09/24/09 10:09	1.0	1	
008	kio08	SAMPLE	214846-004	Water	155248	09/24/09 10:38	1.0	1	
009	kio09	SAMPLE	214923-001	Water	155248	09/24/09 11:06	1.0	1	
010	kio10	SAMPLE	214925-001	Water	155248	09/24/09 11:34	1.0	1	
011	kio11	SAMPLE	214925-002	Water	155248	09/24/09 12:02	1.0	1	
012	kio12	SAMPLE	214925-003	Water	155248	09/24/09 12:30	1.0	1	
013	kio13	SAMPLE	214851-007	Water	155248	09/24/09 12:59	1.0	1	
014	kio14	MSS	214851-009	Water	155248	09/24/09 13:27	1.0	1	
015	kio15	SAMPLE	214851-014	Water	155248	09/24/09 13:55	1.0	1	
016	kio16	SAMPLE	214851-015	Water	155248	09/24/09 14:23	1.0	1	
017	kio17	SAMPLE	214851-016	Water	155248	09/24/09 14:52	1.0	1	
018	kio18	SAMPLE	214851-017	Water	155248	09/24/09 15:20	1.0	1	
019	kio19	SAMPLE	214923-002	Water	155248	09/24/09 15:48	1.0	1	
020	kio20	SAMPLE	214923-003	Water	155248	09/24/09 16:17	1.0	1	
021	kio21	SAMPLE	214923-004	Water	155248	09/24/09 16:45	1.0	1	
022	kio22	SAMPLE	214923-006	Water	155248	09/24/09 17:13	1.0	1	1:TCE=160
023	kio23	SAMPLE	214923-007	Water	155248	09/24/09 17:42	1.0	1	
024	kio24	SAMPLE	214923-008	Water	155248	09/24/09 18:10	1.0	1	
025	kio25	SAMPLE	214923-009	Water	155248	09/24/09 18:38	1.0	1	
026	kio26	SAMPLE	214923-005	Water	155248	09/24/09 19:07	2.0	1	
027	kio27	MS	QC513430	Water	155248	09/24/09 19:35	1.0	1 7 8 9 10	
028	kio28	MSD	QC513431	Water	155248	09/24/09 20:03	1.0	1 7 8 9 10	
029	kio29	X	IB			09/24/09 20:31	1.0	1	
030	kio30	X	IB			09/24/09 21:00	1.0	1	
031	kio31	X	IB			09/24/09 21:28	1.0	1	
032	kio32	X	IB			09/24/09 21:56	1.0	1	
033	kio33	X	IB			09/24/09 22:24	1.0	1	

BO 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839386393

Instrument : MSVOA11 Begun : 09/25/09 07:53
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kip01	X	IB			09/25/09 07:53	1.0	1	
002	kip02	X	BFB			09/25/09 08:22	1.0	2	
003	kip03	X	BFB			09/25/09 08:34	1.0	2	
004	kip04	X	BFB			09/25/09 08:48	1.0	2	
005	kip05	X	20PPB			09/25/09 09:05	1.0	3 4 5 6 1	
006	kip06	TUN	BFB			09/25/09 09:38	1.0	2	
007	kip07	X	20PPB			09/25/09 09:52	1.0	3 4 5 6 1	
008	kip08	CCV/LCS	QC513643	Water	155309	09/25/09 10:31	1.0	7 8 9 10 1	
009	kip09	X	IB			09/25/09 10:59	1.0	1	
010	kip10	BLANK	QC513644	Water	155309	09/25/09 11:27	1.0	1	
011	kip11	SAMPLE	215139-004	Water	155309	09/25/09 12:05	1.0	1	
012	kip12	SAMPLE	215157-002	Water	155309	09/25/09 12:33	1.0	1	
013	kip13	SAMPLE	215157-001	Water	155309	09/25/09 13:02	1.0	1	1:MTBE=150
014	kip14	SAMPLE	214922-001	Water	155309	09/25/09 13:30	1.0	1	
015	kip15	SAMPLE	214925-004	Water	155309	09/25/09 13:59	1.0	1	
016	kip16	SAMPLE	215157-001	Water	155309	09/25/09 14:27	5.0	1	
017	kip17	SAMPLE	214925-005	Water	155309	09/25/09 14:55	1.0	1	
018	kip18	SAMPLE	214925-006	Water	155309	09/25/09 15:24	1.0	1	
019	kip19	SAMPLE	214925-007	Water	155309	09/25/09 15:52	1.0	1	
020	kip20	SAMPLE	214925-008	Water	155309	09/25/09 16:20	1.0	1	
021	kip21	SAMPLE	214925-009	Water	155309	09/25/09 16:49	1.0	1	
022	kip22	SAMPLE	214925-010	Water	155309	09/25/09 17:17	1.0	1	
023	kip23	SAMPLE	214925-011	Water	155309	09/25/09 17:45	1.0	1	
024	kip24	SAMPLE	214925-012	Water	155309	09/25/09 18:14	1.0	1	
025	kip25	MSS	214922-002	Water	155309	09/25/09 18:42	1.0	1	
026	kip26	SAMPLE	214922-003	Water	155309	09/25/09 19:10	2.0	1	
027	kip27	SAMPLE	214922-004	Water	155309	09/25/09 19:39	2.0	1	
028	kip28	SAMPLE	214922-006	Water	155309	09/25/09 20:07	4.0	1	
029	kip29	SAMPLE	214923-006	Water	155309	09/25/09 20:35	5.0	1	
030	kip30	MS	QC513653	Water	155309	09/25/09 21:04	1.0	1 7 8 9 10	
031	kip31	MSD	QC513654	Water	155309	09/25/09 21:32	1.0	1 7 8 9 10	
032	kip32	X	IB			09/25/09 22:00	1.0	1	
033	kip33	X	IB			09/25/09 22:29	1.0	1	
034	kip34	X	IB			09/25/09 22:57	1.0	1	
035	kip35	X	IB			09/25/09 23:25	1.0	1	
036	kip36	X	IB			09/25/09 23:53	1.0	1	

BO 09/25/09 : kip04, kip06, adjusted tune

BO 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 36.

BO 09/25/09 : Sequence reviewed up to kip11

LW 09/25/09 : Sequence reviewed through kip11

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/28/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

GC/MS VOLATILE ORGANICS

Batch #: 155248

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments CH2MT4Z	Initials & Date
1	214846-4	C	<2	LV	1		11	MM 1X, B&BT, MTBE 76 on col hold 9/24, due 9/28	
2	214851-9	A			3			1X MSS	
3	-9	BCD						MS/MSD	
4	-14	A							
5	-15								
6	-16								
7	-17								
8	214923-1	A			4			TB	
9	-2							1X	
10	-3								
11	-4								
12	-5		<2			11		2X	
13	-6							1X	
14	-7								
15	-8								
16	-9								
17	214925-1	A			4			TB	
18	-2							1X	
19	-3								
20	-4		Z					PUT OFF	
21	214851-7	C	<2	LV			11	MM 1X, OD	
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155308

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214923-9	C	<2				8	mn 1x, BFB 4, MTBE 15, 11DCE 21, Bm 9.5 hold 9/28	MJD 9/25/09
2	215015-2	AEF	<2					MS/MSD RR PATCH # 155261	
3	215085-1	A	<2					1x	
4	-2							1x	
5	-3		<2			8		142x	
6	215091-1	A	<2			4		4x	
7	215092-1		<2					1x	
8	2								
9	3								
10	4	B							
11	5								
12	6	A							
13	215101-1	A	<2			15		25x	
14	-2	B	<2					1x	
15	215127-1	C							
16	215125-1								
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155309

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214923-6	B				2	11	MM 5x, TCE > UL hold 9/28	
2	215139-4	A	<2 ✓					TB	
3	215157-1	B	<2					1x	
4	-2	A						TB	
5	214925-5	A						1x	
6	-6								
7	-7								
8	-8								
9	-9								
10	-10								
11	-11								
12	-12								
13	214922-1	A						TB	
14	-2	A	✓					1x MS	
15	-2	B&D	<2					1x MS/MSD	
16	-3	A				3		2x	
17	-4					4		2x	
18	-5		2					1x PUT OFF	
19	-6		<2			6		4x	
20	-7	2	2					1x PUT OFF	
21	214925-4	A	<2				11	1x	
22	~~214~~								
23	215157-1	C	<2			4	11	MM 5x, MTBE > UL	
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Laboratory Job Number 214923

ANALYTICAL REPORT

Metals

Matrix: Water

Curtis & Tompkins, Ltd.

Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Prepared:	09/25/09
Diln Fac:	1.000	Analyzed:	09/28/09
Batch#:	155317		

Field ID	Type	Lab ID	Result	RL	ADEQ Flags
PL-202N-9C1	SAMPLE	214923-005	83	5.0	
PL-517-9C1	SAMPLE	214923-006	86	5.0	
	BLANK	QC513674	ND	5.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Batch#:	155317
Field ID:	PL-202N-9C1	Sampled:	09/14/09
MSS Lab ID:	214923-005	Received:	09/16/09
Matrix:	Water	Prepared:	09/25/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC513675		200.0	199.9	100	89-120			
BSD	QC513676		200.0	206.5	103	89-120	3	20	
MS	QC513677	82.83	200.0	287.8	102	84-120			
MSD	QC513678		200.0	285.5	101	84-120	1	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	PL-202N-9C1	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	155317
MSS Lab ID:	214923-005	Sampled:	09/14/09
Lab ID:	QC513679	Received:	09/16/09
Matrix:	Water	Analyzed:	09/28/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
82.83	5.000	81.44	25.00	2	10	

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3010A
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	PL-202N-9C1	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	155317
MSS Lab ID:	214923-005	Sampled:	09/14/09
Lab ID:	QC513680	Received:	09/16/09
Matrix:	Water	Analyzed:	09/28/09

MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
82.83	500.0	530.9	90	75-125	

REPORTING SUMMARY FOR 214923 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	NI	
214923-005	MET08	09/28/09 11:40	1.0	+	
214923-006	MET08	09/28/09 12:45	1.0	+	
QC513674	MET08	09/28/09 11:25	1.0	+	
QC513675	MET08	09/28/09 11:30	1.0	+	
QC513676	MET08	09/28/09 11:35	1.0	+	
QC513677	MET08	09/28/09 11:46	1.0	+	
QC513678	MET08	09/28/09 11:51	1.0	+	
QC513679	MET08	09/28/09 11:55	5.0	+	
QC513680	MET08	09/28/09 12:13	1.0	+	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89390747

Instrument : MET08 Begun : 09/28/09 08:27
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sn_6010	ICALBLK				09/28/09 08:27	1.0		
002	met08_sn_6010	ICAL	CRIM08			09/28/09 08:32	1.0	1	
003	met08_sn_6010	ICAL	CS100			09/28/09 08:38	1.0	2	
004	met08_sn_6010	ICAL	CS1K			09/28/09 08:42	1.0	3	
005	met08_sn_6010	ICAL	CS10K			09/28/09 08:46	1.0	4	
006	met08_sn_6010	ICAL	CS100K			09/28/09 08:51	1.0	5	
007	met08_sn_6010	X	S12281			09/28/09 08:57	1.0		
008	met08_sn_6010	X	S12281			09/28/09 09:28	1.0		
009	met08_sn_6010	ICV				09/28/09 09:40	1.0	6	
010	met08_sn_6010	ICB				09/28/09 09:45	1.0		
011	met08_sn_6010	CRI				09/28/09 09:50	1.0	1	
012	met08_sn_6010	ICSA				09/28/09 09:56	1.0	7	10:AL=440000
013	met08_sn_6010	X				09/28/09 10:06	1.0	8	5:AL=460000
014	met08_sn_6010	X				09/28/09 10:12	1.0	8	5:AL=450000
015	met08_sn_6010	ICSAB				09/28/09 10:16	1.0	8	5:AL=440000
016	met08_sn_6010	MS	QC513368	Soil	155237	09/28/09 10:22	20.0		
017	met08_sn_6010	MSD	QC513369	Soil	155237	09/28/09 10:26	20.0		
018	met08_sn_6010	SAMPLE	215094-006	Soil	155237	09/28/09 10:31	20.0		
019	met08_sn_6010	SAMPLE	215094-007	Soil	155237	09/28/09 10:36	20.0		
020	met08_sn_6010	SAMPLE	215094-008	Soil	155237	09/28/09 10:40	20.0		
021	met08_sn_6010	SAMPLE	215094-009	Soil	155237	09/28/09 10:45	20.0		
022	met08_sn_6010	MSS	215094-001	Soil	155237	09/28/09 10:50	20.0		
023	met08_sn_6010	SER	QC513370	Soil	155237	09/28/09 10:54	100.0		
024	met08_sn_6010	CCV				09/28/09 10:59	1.0	9	
025	met08_sn_6010	CCB				09/28/09 11:05	1.0		
026	met08_sn_6010	PDS	QC513371	Soil	155237	09/28/09 11:11	20.0	10 11	
027	met08_sn_6010	ICSAB				09/28/09 11:15	1.0	8	5:MG=480000
028	met08_sn_6010	X	RINSE			09/28/09 11:19	1.0		
029	met08_sn_6010	BLANK	QC513674	Water	155317	09/28/09 11:25	1.0		
030	met08_sn_6010	BS	QC513675	Water	155317	09/28/09 11:30	1.0		
031	met08_sn_6010	BSD	QC513676	Water	155317	09/28/09 11:35	1.0		
032	met08_sn_6010	MSS	214923-005	Water	155317	09/28/09 11:40	1.0		1:NA=210000
033	met08_sn_6010	MS	QC513677	Water	155317	09/28/09 11:46	1.0		
034	met08_sn_6010	MSD	QC513678	Water	155317	09/28/09 11:51	1.0		
035	met08_sn_6010	SER	QC513679	Water	155317	09/28/09 11:55	5.0		
036	met08_sn_6010	CCV				09/28/09 12:01	1.0	9	
037	met08_sn_6010	CCB				09/28/09 12:07	1.0		
038	met08_sn_6010	PDS	QC513680	Water	155317	09/28/09 12:13	1.0	12 13	
039	met08_sn_6010	SAMPLE	215132-001	Water	155317	09/28/09 12:18	1.0		
040	met08_sn_6010	SAMPLE	215148-001	Water	155317	09/28/09 12:23	1.0		
041	met08_sn_6010	SAMPLE	215148-002	Water	155317	09/28/09 12:29	1.0		
042	met08_sn_6010	ICSAB				09/28/09 12:35	1.0	8	5:MG=440000
043	met08_sn_6010	X	RINSE			09/28/09 12:39	1.0		
044	met08_sn_6010	SAMPLE	214923-006	Water	155317	09/28/09 12:45	1.0		1:NA=210000
045	met08_sn_6010	SAMPLE	214950-002	Water	155317	09/28/09 12:51	1.0		
046	met08_sn_6010	SAMPLE	215084-001	Water	155317	09/28/09 12:59	1.0		2:MG=290000
047	met08_sn_6010	SAMPLE	215084-002	Water	155317	09/28/09 13:07	1.0		3:NA=510000
048	met08_sn_6010	CCV				09/28/09 13:14	1.0	9	
049	met08_sn_6010	CCB				09/28/09 13:21	1.0		
050	met08_sn_6010	SAMPLE	215084-003	Water	155317	09/28/09 13:27	1.0		1:NA=140000
051	met08_sn_6010	SAMPLE	215097-001	Water	155317	09/28/09 13:32	1.0		1:NA=200000
052	met08_sn_6010	SAMPLE	215100-001	Water	155317	09/28/09 13:37	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89390747

Instrument : MET08 Begun : 09/28/09 08:27
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sn_6010	SAMPLE	215100-002	Water	155317	09/28/09 13:43	1.0		
054	met08_sn_6010	SAMPLE	215117-001	Water	155317	09/28/09 13:49	1.0		2:NA=590000
055	met08_sn_6010	SAMPLE	215117-002	Water	155317	09/28/09 13:55	1.0		3:NA=790000
056	met08_sn_6010	SAMPLE	215117-003	Water	155317	09/28/09 14:03	1.0		2:NA=110000
057	met08_sn_6010	SAMPLE	215117-004	Water	155317	09/28/09 14:08	1.0		
058	met08_sn_6010	SAMPLE	215117-005	Water	155317	09/28/09 14:14	1.0		3:CA=350000
059	met08_sn_6010	SAMPLE	215117-006	Water	155317	09/28/09 14:21	1.0		3:NA=430000
060	met08_sn_6010	CCV				09/28/09 14:26	1.0	9	
061	met08_sn_6010	CCB				09/28/09 14:33	1.0		
062	met08_sn_6010	SAMPLE	215117-007	Water	155317	09/28/09 14:39	1.0		
063	met08_sn_6010	SAMPLE	215084-001	Water	155317	09/28/09 14:44	1.0		2:MG=300000
064	met08_sn_6010	SAMPLE	215084-002	Water	155317	09/28/09 14:52	1.0		3:NA=530000
065	met08_sn_6010	ICSAB				09/28/09 14:58	1.0	8	5:MG=470000
066	met08_sn_6010	X				09/28/09 15:01	1.0	9	
067	met08_sn_6010	CCV				09/28/09 15:03	1.0	9	
068	met08_sn_6010	CCB				09/28/09 15:11	1.0		

AH 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 54.

Standards used: 1=S12500 2=S12797 3=S12796 4=S12795 5=S12798 6=S12881 7=S12810 8=S12730 9=S12882 10=S12182 11=S12183 12=S9267 13=S9268

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89390747

Date : 09/28/09 Reference : met08_sn_6010
Sequence : MET08 09/28/09 Analyzed : 09/28/09 08:32

#	Type	Sample ID	Y A
		ICAL STD	1284362
		LOWER LIMIT	385309
		UPPER LIMIT	2568725
010	ICB		1337644
012	ICSA		1185874
015	ICSAB		1110309
016	MS	QC513368	1342000
017	MSD	QC513369	1291375
018	SAMPLE	215094-006	1319660
019	SAMPLE	215094-007	1363544
020	SAMPLE	215094-008	1349859
021	SAMPLE	215094-009	1358997
022	MSS	215094-001	1289802
023	SER	QC513370	1331639
024	CCV		1313630
025	CCB		1377487
026	PDS	QC513371	1295587
027	ICSAB		1170519
029	BLANK	QC513674	1330822
030	BS	QC513675	1309262
031	BSD	QC513676	1268347
032	MSS	214923-005	1307837
033	MS	QC513677	1268738
034	MSD	QC513678	1280642
035	SER	QC513679	1317067
036	CCV		1329384
037	CCB		1330296
038	PDS	QC513680	1350009
039	SAMPLE	215132-001	1337660
040	SAMPLE	215148-001	1329013
041	SAMPLE	215148-002	1332624
042	ICSAB		1220069
044	SAMPLE	214923-006	1247205
045	SAMPLE	214950-002	1251815
046	SAMPLE	215084-001	1249238
047	SAMPLE	215084-002	1301968
048	CCV		1316974
049	CCB		1335164
050	SAMPLE	215084-003	1293713
051	SAMPLE	215097-001	1265649
052	SAMPLE	215100-001	1289673
053	SAMPLE	215100-002	1303042
054	SAMPLE	215117-001	1254959
055	SAMPLE	215117-002	1242114
056	SAMPLE	215117-003	1321256
057	SAMPLE	215117-004	1367120
058	SAMPLE	215117-005	1313979
059	SAMPLE	215117-006	1245565
060	CCV		1326563
061	CCB		1357413
062	SAMPLE	215117-007	1322219

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89390747

Date : 09/28/09 Reference : met08_sn_6010
Sequence : MET08 09/28/09 Analyzed : 09/28/09 08:32

#	Type	Sample ID	Y A
063	SAMPLE	215084-001	1244999
064	SAMPLE	215084-002	1297592
065	ICSAB		1228462
067	CCV		1320365
068	CCB		1344932

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 METALS Water: EPA 6010B

Inst : MET08 Reviewer : ---
Calnum : 89390747001 Date : 28-SEP-2009 08:27
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sn_6010	89390747002	CRIM08	28-SEP-2009 08:32	S12500
L2	met08_sn_6010	89390747003	CS100	28-SEP-2009 08:38	S12797
L3	met08_sn_6010	89390747004	CS1K	28-SEP-2009 08:42	S12796
L4	met08_sn_6010	89390747005	CS10K	28-SEP-2009 08:46	S12795
L5	met08_sn_6010	89390747006	CS100K	28-SEP-2009 08:51	S12798

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Nickel	A	21.280	19.895	19.383	19.768		LOR0	0.00000	0.05060		20.081	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Nickel	A	5.000	8	100.0	1	1000	-2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214923 METALS Water
EPA 6010B

Inst : MET08
Calnum : 89390747001 Cal Date : 28-SEP-2009

ICV 89390747009 (28-SEP-2009) stds: S12881

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Nickel	A	5000	4904	ug/L	-2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747010.1 File : met08_sn_6010 Time : 28-SEP-2009 09:45
Cal : 89390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1337644	4.15

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747011.1 File : met08_sn_6010 Time : 28-SEP-2009 09:50
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12500

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	5.000	6.058	ug/L	21	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1358653	5.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747012.1 File : met08_sn_6010 Time : 28-SEP-2009 09:56
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12810

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19200	ug/L	96
Copper	A	20000	19550	ug/L	98
Manganese	A	20000	18480	ug/L	92
Nickel	A	20000	18580	ug/L	93
Vanadium	A	20000	20290	ug/L	101
Aluminum	R	500000	442500	ug/L	89
Calcium	R	500000	427200	ug/L	85
Iron	R	200000	176100	ug/L	88
Magnesium	R	500000	440700	ug/L	88
Titanium	R	20000	20390	ug/L	102

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1185874	-7.67

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747024.1 File : met08_sn_6010 Time : 28-SEP-2009 10:59
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	20.081	20.562	5000	5202	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1313630	2.28

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747025.1 File : met08_sn_6010 Time : 28-SEP-2009 11:05
Cal : 89390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1377487	7.25

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747027.1 File : met08_sn_6010 Time : 28-SEP-2009 11:15
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	898.9	ug/L	-10	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1170519	-8.86

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747036.1 File : met08_sn_6010 Time : 28-SEP-2009 12:01
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	20.081	20.159	5000	5100	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1329384	3.51

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747037.1 File : met08_sn_6010 Time : 28-SEP-2009 12:07
Cal : 89390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1330296	3.58

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747042.1 File : met08_sn_6010 Time : 28-SEP-2009 12:35
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	877.7	ug/L	-12	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1220069	-5.01

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747048.2 File : met08_sn_6010 Time : 28-SEP-2009 13:14
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	20.081	20.259	5000	5125	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1316974	2.54

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747049.2 File : met08_sn_6010 Time : 28-SEP-2009 13:21
Cal : 89390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1335164	3.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214923 METALS Water
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89390747065.1 File : met08_sn_6010 Time : 28-SEP-2009 14:58
Cal : 89390747001 Caldate : 28-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	926.7	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1284362	1228462	-4.35

SAMPLE PREPARATION SUMMARY

Batch # : 155317
Started By : VV
Method : 3010A
Spike #1 ID : S12256

Prep Date : 25-SEP-2009 10:30
SOP Version : 3010A_icp_rv9
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214923-005		Water	50	50	1	1.0						NI	
214923-006		Water	50	50	1	1.0						NI	
214950-002		Water	50	50	1	1.0						CU, NI, PB, SE, ZN	
215084-001		Water	50	50	1	1.0						AS, CR, FE, MN, SE	
215084-002		Water	50	50	1	1.0						AS, CR, FE, MN, SE	
215084-003		Water	50	50	1	1.0						AS, CR, FE, MN, SE	
215097-001		Water	50	50	1	1.0						CR	
215100-001		Water	50	50	1	1.0						AS, CR, FE, MN, SE	
215100-002		Water	50	50	1	1.0						AS, CR, FE, MN, SE	
215117-001		Water	50	50	1	1.0						PB	
215117-002		Water	50	50	1	1.0						PB	
215117-003		Water	50	50	1	1.0						PB	
215117-004		Water	50	50	1	1.0						PB	
215117-005		Water	50	50	1	1.0						PB	
215117-006		Water	50	50	1	1.0						PB	
215117-007		Water	50	50	1	1.0						PB	
215132-001		Water	50	50	1	1.0						AG, AS, CD, CR, CU, NI, PB, ZN	
215148-001		Water	50	50	1	1.0						PB	
215148-002		Water	50	50	1	1.0						PB	
QC513674	BLANK	Water	50	50	1	1.0							
QC513675	BS	Water	50	50	1	1.0		.5	.5				
QC513676	BSD	Water	50	50	1	1.0		.5	.5				
QC513677	MS	Water	50	50	1	1.0		.5	.5				
QC513678	MSD	Water	50	50	1	1.0		.5	.5				
QC513679	SER	Water	50	50	1	1.0							
QC513680	PDS	Water	50	50	1	1.0							

Reviewed by: AH Date: 09/28/09

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 155317
Digested by: 9-25-09 VV
Date Digested: 9-25-09

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK2931
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Continued From: ø
Continued On: ø

	Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK 513674	QC	50	50	n	
*	BS 5					
*	BSD 6					
*	214923-005 MS	D				
*	-005 MSD					
	-005					
	-006					
	214950-002	A				
	215084-001	F				
10	-002					
	-003					
	215097-001	E				
	215100-002	F				
	-001	A				
15	215117-001	I				
	-002	M				
	-003	J				
	-004	M				
	-005	K				
20	-006	H				
	-007	C				
	215132-001	G				
	215148-001	A				
	-002					

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	C.V # 081218	
0.5 mL of spike solution (Std1) was added to all spikes	S12256*	9-25-09 VV
0.5 mL of spike solution (Std2) was added to all spikes	S12257*	
Digestion temperature (90-95 degrees C)	95°C	
Digestion started at (time)	10:30AM	
☐ 1:1 HNO3, ☒ concentrated HNO3, added to all samples	H12022-JTBaker	
1:1 HCl added to all samples	408100-Fisher	
Digestion ended at (time)	4:30PM	
☐ filtered thru' Whatman # 541	—	
Relinquished to ICP group		

VV 9-25-09
Prep Chemist Signature / Date

Michael C Brockell 9/25/09
Reviewer Signature / Date

Laboratory Job Number 214923

ANALYTICAL REPORT

Metals

Matrix: Filtrate

Curtis & Tompkins, Ltd.

Dissolved Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Sampled:	09/14/09
Matrix:	Filtrate	Received:	09/16/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	1.000	Analyzed:	09/21/09
Batch#:	155039		

Field ID	Type	Lab ID	Result	RL	ADEQ Flags
PL-202N-9C1	SAMPLE	214923-005	77	5.0	
PL-517-9C1	SAMPLE	214923-006	78	5.0	
	BLANK	QC512563	ND	5.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Batch#:	155039
Field ID:	ZZZZZZZZZZ	Sampled:	09/08/09
MSS Lab ID:	214785-003	Received:	09/09/09
Matrix:	Filtrate	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/21/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC512564		200.0	187.4	94	89-120			
BSD	QC512565		200.0	184.6	92	89-120	2	20	
MS	QC512566	16.69	200.0	187.7	85	84-120			
MSD	QC512567		200.0	183.8	84	84-120	2	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	155039
MSS Lab ID:	214785-003	Sampled:	09/08/09
Lab ID:	QC512568	Received:	09/09/09
Matrix:	Filtrate	Analyzed:	09/21/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
16.69	5.000	ND	25.00	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Nickel

Lab #:	214923	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6010B
Analyte:	Nickel	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	155039
MSS Lab ID:	214785-003	Sampled:	09/08/09
Lab ID:	QC512569	Received:	09/09/09
Matrix:	Filtrate	Analyzed:	09/21/09

MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
16.69	500.0	464.9	90	75-125	

REPORTING SUMMARY FOR 214923 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	NI	
214923-005	MET08	09/21/09 19:23	1.0	+	
214923-006	MET08	09/21/09 19:29	1.0	+	
QC512563	MET08	09/21/09 16:54	1.0	+	
QC512564	MET08	09/21/09 17:00	1.0	+	
QC512565	MET08	09/21/09 17:05	1.0	+	
QC512566	MET08	09/21/09 17:30	1.0	+	
QC512567	MET08	09/21/09 17:37	1.0	+	
QC512568	MET08	09/21/09 17:45	5.0	+	
QC512569	MET08	09/21/09 17:54	1.0	+	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89380688

Instrument : MET08 Begun : 09/21/09 08:48
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sr_6010	ICALBLK				09/21/09 08:48	1.0		
002	met08_sr_6010	ICAL	CRIM08			09/21/09 08:53	1.0	1	
003	met08_sr_6010	ICAL	CS100			09/21/09 08:59	1.0	2	
004	met08_sr_6010	ICAL	CS1K			09/21/09 09:03	1.0	3	
005	met08_sr_6010	ICAL	CS10K			09/21/09 09:08	1.0	4	
006	met08_sr_6010	ICAL	CS100K			09/21/09 09:14	1.0	5	
007	met08_sr_6010	ICV				09/21/09 09:20	1.0	6	
008	met08_sr_6010	ICB				09/21/09 09:26	1.0		
009	met08_sr_6010	CRI				09/21/09 09:31	1.0	1	
010	met08_sr_6010	X				09/21/09 09:36	1.0	7	
011	met08_sr_6010	ICSA				09/21/09 09:39	1.0	7	10:AL=510000
012	met08_sr_6010	ICSAB				09/21/09 09:52	1.0	8	5:AL=520000
013	met08_sr_6010	BLANK	QC511638	Water	154805	09/21/09 09:58	1.0		
014	met08_sr_6010	BS	QC511639	Water	154805	09/21/09 10:04	1.0		
015	met08_sr_6010	BSD	QC511640	Water	154805	09/21/09 10:09	1.0		
016	met08_sr_6010	MSS	214728-005	Water	154805	09/21/09 10:14	1.0		1:NA=120000
017	met08_sr_6010	MS	QC511641	Water	154805	09/21/09 10:19	1.0		
018	met08_sr_6010	MSD	QC511642	Water	154805	09/21/09 10:24	1.0		
019	met08_sr_6010	SAMPLE	214728-001	Water	154805	09/21/09 10:29	1.0		
020	met08_sr_6010	SAMPLE	214735-001	Water	154805	09/21/09 10:37	1.0		2:CA=220000
021	met08_sr_6010	CCV				09/21/09 10:43	1.0	9	
022	met08_sr_6010	CCB				09/21/09 10:49	1.0		
023	met08_sr_6010	ICSAB				09/21/09 10:56	1.0	8	5:AL=510000
024	met08_sr_6010	X	RINSE			09/21/09 11:02	1.0		
025	met08_sr_6010	BSD	QC511640	Water	154805	09/21/09 11:08	1.0		
026	met08_sr_6010	BLANK	QC512718	Soil	155081	09/21/09 11:13	1.0		
027	met08_sr_6010	BS	QC512719	Soil	155081	09/21/09 11:19	1.0		
028	met08_sr_6010	BSD	QC512720	Soil	155081	09/21/09 11:24	1.0		
029	met08_sr_6010	MSS	215000-001	Soil	155081	09/21/09 11:29	1.0		4:FE=340000
030	met08_sr_6010	MS	QC512721	Soil	155081	09/21/09 11:35	1.0		
031	met08_sr_6010	MSD	QC512722	Soil	155081	09/21/09 11:42	1.0		
032	met08_sr_6010	SAMPLE	215000-002	Soil	155081	09/21/09 11:48	1.0		2:FE=280000
033	met08_sr_6010	X				09/21/09 11:54	1.0	9	
034	met08_sr_6010	X				09/21/09 11:56	1.0	9	
035	met08_sr_6010	CCV				09/21/09 11:59	1.0	9	
036	met08_sr_6010	CCB				09/21/09 12:06	1.0		
037	met08_sr_6010	ICSAB				09/21/09 12:12	1.0	8	5:AL=530000
038	met08_sr_6010	SAMPLE	214901-001	Soil	155081	09/21/09 12:18	1.0		9:FE=640000
039	met08_sr_6010	SAMPLE	214901-003	Soil	155081	09/21/09 12:24	1.0		8:FE=720000
040	met08_sr_6010	SAMPLE	214901-004	Soil	155081	09/21/09 12:31	1.0		7:PB=870000
041	met08_sr_6010	SAMPLE	214901-005	Soil	155081	09/21/09 12:37	1.0		4:PB=660000
042	met08_sr_6010	X	RINSE			09/21/09 12:44	1.0		
043	met08_sr_6010	X	RINSE			09/21/09 12:49	1.0		
044	met08_sr_6010	SAMPLE	214970-001	Miscell.	155081	09/21/09 12:54	1.0		2:FE=320000
045	met08_sr_6010	MSS	214710-003	Water	154719	09/21/09 12:59	10.0		
046	met08_sr_6010	MS	QC511308	Water	154719	09/21/09 13:06	10.0		
047	met08_sr_6010	X				09/21/09 13:11	1.0	9	
048	met08_sr_6010	X				09/21/09 13:13	1.0	9	
049	met08_sr_6010	X				09/21/09 13:19	1.0		
050	met08_sr_6010	X				09/21/09 13:23	1.0		
051	met08_sr_6010	MSD	QC511309	Water	154719	09/21/09 13:28	10.0		
052	met08_sr_6010	SAMPLE	214714-001	Water	154719	09/21/09 13:33	10.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89380688

Instrument : MET08 Begun : 09/21/09 08:48
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sr_6010	CRI				09/21/09 13:39	1.0	1	
054	met08_sr_6010	ICSAB				09/21/09 13:45	1.0	8	5:AL=550000
055	met08_sr_6010	CCV				09/21/09 13:51	1.0	9	
056	met08_sr_6010	X				09/21/09 13:54	1.0	9	
057	met08_sr_6010	CCB				09/21/09 14:00	1.0		
058	met08_sr_6010	MSS	215000-001	Soil	155081	09/21/09 14:08	20.0		
059	met08_sr_6010	MS	QC512721	Soil	155081	09/21/09 14:13	20.0		
060	met08_sr_6010	MSD	QC512722	Soil	155081	09/21/09 14:18	20.0		
061	met08_sr_6010	SAMPLE	214901-001	Soil	155081	09/21/09 14:23	20.0		1:ZN=11000
062	met08_sr_6010	SAMPLE	214901-002	Soil	155081	09/21/09 14:30	20.0		
063	met08_sr_6010	SAMPLE	214901-003	Soil	155081	09/21/09 14:35	20.0		
064	met08_sr_6010	SAMPLE	214901-004	Soil	155081	09/21/09 14:40	20.0		2:ZN=88000
065	met08_sr_6010	SAMPLE	214901-005	Soil	155081	09/21/09 14:47	20.0		2:ZN=49000
066	met08_sr_6010	CCV				09/21/09 14:53	1.0	9	
067	met08_sr_6010	X				09/21/09 14:55	1.0	9	
068	met08_sr_6010	CCB				09/21/09 15:01	1.0		
069	met08_sr_6010	SAMPLE	214901-006	Soil	155081	09/21/09 15:07	20.0		
070	met08_sr_6010	SAMPLE	214901-001	Soil	155081	09/21/09 15:12	200.0		
071	met08_sr_6010	SAMPLE	214901-004	Soil	155081	09/21/09 15:17	200.0		
072	met08_sr_6010	SAMPLE	214901-005	Soil	155081	09/21/09 15:24	200.0		
073	met08_sr_6010	ICSAB				09/21/09 15:30	1.0	8	5:AL=540000
074	met08_sr_6010	X	RINSE			09/21/09 15:36	1.0		
075	met08_sr_6010	BLANK	QC511754	TCLP Leachate	154836	09/21/09 15:41	10.0		1:NA=170000
076	met08_sr_6010	BLANK	QC511761	TCLP Leachate	154836	09/21/09 15:46	10.0		
077	met08_sr_6010	BS	QC511755	TCLP Leachate	154836	09/21/09 15:52	1.0		
078	met08_sr_6010	BSD	QC511756	TCLP Leachate	154836	09/21/09 15:57	1.0		
079	met08_sr_6010	CCV				09/21/09 16:02	1.0	9	
080	met08_sr_6010	CCB				09/21/09 16:08	1.0		
081	met08_sr_6010	MSS	214732-001	TCLP Leachate	154836	09/21/09 16:14	10.0		1:NA=180000
082	met08_sr_6010	MS	QC511757	TCLP Leachate	154836	09/21/09 16:20	10.0		
083	met08_sr_6010	MSD	QC511758	TCLP Leachate	154836	09/21/09 16:25	10.0		
084	met08_sr_6010	SAMPLE	214741-001	TCLP Leachate	154836	09/21/09 16:30	10.0		1:CA=310000
085	met08_sr_6010	SAMPLE	214741-002	TCLP Leachate	154836	09/21/09 16:37	10.0		2:CA=540000
086	met08_sr_6010	X				09/21/09 16:43	1.0	8	5:MG=560000
087	met08_sr_6010	X	RINSE			09/21/09 16:49	1.0		
088	met08_sr_6010	BLANK	QC512563	Filtrate	155039	09/21/09 16:54	1.0		
089	met08_sr_6010	BS	QC512564	Filtrate	155039	09/21/09 17:00	1.0		
090	met08_sr_6010	BSD	QC512565	Filtrate	155039	09/21/09 17:05	1.0		
091	met08_sr_6010	CCV				09/21/09 17:10	1.0	9	
092	met08_sr_6010	CCB				09/21/09 17:16	1.0		
093	met08_sr_6010	MSS	214785-003	Filtrate	155039	09/21/09 17:22	1.0		3:MG=690000
094	met08_sr_6010	MS	QC512566	Filtrate	155039	09/21/09 17:30	1.0		
095	met08_sr_6010	MSD	QC512567	Filtrate	155039	09/21/09 17:37	1.0		
096	met08_sr_6010	SER	QC512568	Filtrate	155039	09/21/09 17:45	5.0		
097	met08_sr_6010	PDS	QC512569	Filtrate	155039	09/21/09 17:54	1.0	10 11	
098	met08_sr_6010	SAMPLE	214785-002	Filtrate	155039	09/21/09 18:01	1.0		2:CA=1500000
099	met08_sr_6010	SAMPLE	214903-001	Filtrate	155039	09/21/09 18:07	1.0		3:MG=370000
100	met08_sr_6010	ICSAB				09/21/09 18:15	1.0	8	5:AL=540000
101	met08_sr_6010	X	RINSE			09/21/09 18:20	1.0		
102	met08_sr_6010	SAMPLE	214805-006	Filtrate	155039	09/21/09 18:25	1.0		1:NA=130000
103	met08_sr_6010	CCV				09/21/09 18:30	1.0	9	
104	met08_sr_6010	CCB				09/21/09 18:36	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89380688

Instrument : MET08 Begun : 09/21/09 08:48
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met08_sr_6010	SAMPLE	214858-002	Filtrate	155039	09/21/09 18:41	1.0		3:MG=430000
106	met08_sr_6010	SAMPLE	214858-003	Filtrate	155039	09/21/09 18:48	1.0		4:MG=1400000
107	met08_sr_6010	SAMPLE	214861-002	Filtrate	155039	09/21/09 18:56	1.0		3:CA=670000
108	met08_sr_6010	SAMPLE	214861-003	Filtrate	155039	09/21/09 19:03	1.0		3:CA=630000
109	met08_sr_6010	SAMPLE	214861-004	Filtrate	155039	09/21/09 19:09	1.0		2:CA=2200000
110	met08_sr_6010	SAMPLE	214861-005	Filtrate	155039	09/21/09 19:16	1.0		3:MG=570000
111	met08_sr_6010	SAMPLE	214923-005	Filtrate	155039	09/21/09 19:23	1.0		1:NA=210000
112	met08_sr_6010	SAMPLE	214923-006	Filtrate	155039	09/21/09 19:29	1.0		1:NA=210000
113	met08_sr_6010	CRI				09/21/09 19:34	1.0	1	
114	met08_sr_6010	X				09/21/09 19:38	1.0	1	
115	met08_sr_6010	ICSAB				09/21/09 19:44	1.0	8	5:AL=530000
116	met08_sr_6010	X				09/21/09 19:49	1.0	9	
117	met08_sr_6010	CCV				09/21/09 19:51	1.0	9	
118	met08_sr_6010	CCB				09/21/09 19:57	1.0		

AH 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 118.

Standards used: 1=S12500 2=S12797 3=S12796 4=S12795 5=S12798 6=S12881 7=S12810 8=S12730 9=S12882 10=S9267 11=S9268

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89380688

Date : 09/21/09 Reference : met08_sr_6010
Sequence : MET08 09/21/09 Analyzed : 09/21/09 08:53

#	Type	Sample ID	Y A
		ICAL STD	1411551
		LOWER LIMIT	423465
		UPPER LIMIT	2823102
008	ICB		1395929
011	ICSA		1238849
012	ICSAB		1231951
013	BLANK	QC511638	1493472
014	BS	QC511639	1462415
015	BSD	QC511640	1379346
016	MSS	214728-005	1423930
017	MS	QC511641	1390099
018	MSD	QC511642	1401857
019	SAMPLE	214728-001	1301686
020	SAMPLE	214735-001	1290921
021	CCV		1347178
022	CCB		1341639
023	ICSAB		1194566
025	BSD	QC511640	1391494
026	BLANK	QC512718	1423697
027	BS	QC512719	1282220
028	BSD	QC512720	1354613
029	MSS	215000-001	1264907
030	MS	QC512721	1299123
031	MSD	QC512722	1332315
032	SAMPLE	215000-002	1339331
035	CCV		1360354
036	CCB		1414570
037	ICSAB		1198430
038	SAMPLE	214901-001	1396149
039	SAMPLE	214901-003	1378193
040	SAMPLE	214901-004	1244366
041	SAMPLE	214901-005	1335587
044	SAMPLE	214970-001	1328123
045	MSS	214710-003	1356564
046	MS	QC511308	1352908
051	MSD	QC511309	1331751
054	ICSAB		1203368
055	CCV		1320669
057	CCB		1365853
058	MSS	215000-001	1336509
059	MS	QC512721	1366476
060	MSD	QC512722	1271235
061	SAMPLE	214901-001	1366744
062	SAMPLE	214901-002	1329790
063	SAMPLE	214901-003	1401903
064	SAMPLE	214901-004	1382838
065	SAMPLE	214901-005	1398606
066	CCV		1330195
068	CCB		1382254
069	SAMPLE	214901-006	1404350
070	SAMPLE	214901-001	1327087

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89380688

Date : 09/21/09 Reference : met08_sr_6010
Sequence : MET08 09/21/09 Analyzed : 09/21/09 08:53

#	Type	Sample ID	Y A
071	SAMPLE	214901-004	1386967
072	SAMPLE	214901-005	1396671
073	ICSAB		1168869
075	BLANK	QC511754	1295731
076	BLANK	QC511761	1334835
077	BS	QC511755	1338665
078	BSD	QC511756	1367489
079	CCV		1323128
080	CCB		1346617
081	MSS	214732-001	1292650
082	MS	QC511757	1256276
083	MSD	QC511758	1262499
084	SAMPLE	214741-001	1298534
085	SAMPLE	214741-002	1248412
088	BLANK	QC512563	1388746
089	BS	QC512564	1339173
090	BSD	QC512565	1363302
091	CCV		1287486
092	CCB		1372090
093	MSS	214785-003	1127650
094	MS	QC512566	1057760
095	MSD	QC512567	1095615
096	SER	QC512568	1236373
097	PDS	QC512569	1095416
098	SAMPLE	214785-002	1077951
099	SAMPLE	214903-001	1100344
100	ICSAB		1191627
102	SAMPLE	214805-006	1322848
103	CCV		1366880
104	CCB		1420221
105	SAMPLE	214858-002	1054788
106	SAMPLE	214858-003	965008
107	SAMPLE	214861-002	1063759
108	SAMPLE	214861-003	1097734
109	SAMPLE	214861-004	1055294
110	SAMPLE	214861-005	1128622
111	SAMPLE	214923-005	1327373
112	SAMPLE	214923-006	1393681
115	ICSAB		1227235
117	CCV		1379488
118	CCB		1422520

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214923 METALS Filtrate: EPA 6010B

Inst : MET08 Reviewer : ---
Calnum : 89380688001 Date : 21-SEP-2009 08:48
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sr_6010	89380688002	CRIM08	21-SEP-2009 08:53	S12500
L2	met08_sr_6010	89380688003	CS100	21-SEP-2009 08:59	S12797
L3	met08_sr_6010	89380688004	CS1K	21-SEP-2009 09:03	S12796
L4	met08_sr_6010	89380688005	CS10K	21-SEP-2009 09:08	S12795
L5	met08_sr_6010	89380688006	CS100K	21-SEP-2009 09:14	S12798

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Nickel	A	20.260	24.182	24.402	25.860		LOR0	0.00000	0.03869		23.676	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Nickel	A	5.000	-22	100.0	-6	1000	-6	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08
Calnum : 89380688001 Cal Date : 21-SEP-2009

ICV 89380688007 (21-SEP-2009) stds: S12881

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Nickel	A	5000	4845	ug/L	-3	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688008.2 File : met08_sr_6010 Time : 21-SEP-2009 09:26
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1395929	-1.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688011.2 File : met08_sr_6010 Time : 21-SEP-2009 09:39
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12810

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	18190	ug/L	91
Copper	A	20000	18380	ug/L	92
Manganese	A	20000	17210	ug/L	86
Nickel	A	20000	17180	ug/L	86
Vanadium	A	20000	19250	ug/L	96
Aluminum	R	500000	508400	ug/L	102
Calcium	R	500000	483100	ug/L	97
Iron	R	200000	194300	ug/L	97
Magnesium	R	500000	495600	ug/L	99
Titanium	R	20000	19750	ug/L	99

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1238849	-12.23

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688053.1 File : met08_sr_6010 Time : 21-SEP-2009 13:39
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12500

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	5.000	3.236	ug/L	**-35**	30	cri- ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1345432	-4.68

-=low bias

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688073.1 File : met08_sr_6010 Time : 21-SEP-2009 15:30
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	959.7	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1168869	-17.19

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688079.1 File : met08_sr_6010 Time : 21-SEP-2009 16:02
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	25.437	5000	4921	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1323128	-6.26

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688080.1 File : met08_sr_6010 Time : 21-SEP-2009 16:08
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1346617	-4.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688091.1 File : met08_sr_6010 Time : 21-SEP-2009 17:10
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	25.634	5000	4959	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1287486	-8.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688092.1 File : met08_sr_6010 Time : 21-SEP-2009 17:16
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1372090	-2.80

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688100.1 File : met08_sr_6010 Time : 21-SEP-2009 18:15
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	956.4	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1191627	-15.58

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688103.1 File : met08_sr_6010 Time : 21-SEP-2009 18:30
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	25.287	5000	4892	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1366880	-3.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688104.1 File : met08_sr_6010 Time : 21-SEP-2009 18:36
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1420221	0.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688115.1 File : met08_sr_6010 Time : 21-SEP-2009 19:44
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12730

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	1000	911.2	ug/L	-9	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1227235	-13.06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688117.1 File : met08_sr_6010 Time : 21-SEP-2009 19:51
Cal : 89380688001 Caldate : 21-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Nickel	A	23.676	24.490	5000	4738	ug/L	-5	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1379488	-2.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214923 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89380688118.1 File : met08_sr_6010 Time : 21-SEP-2009 19:57
Cal : 89380688001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Nickel	A	ND	5.000	2.062	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1411551	1422520	0.78

SAMPLE PREPARATION SUMMARY

Batch # : 155039
Started By : VV
Method : METHOD
Spike #1 ID : S12256

Prep Date : 17-SEP-2009 09:00
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214785-002		Filtrate	50	50	1	1.0						TAL/ICP	
214785-003		Filtrate	50	50	1	1.0						TAL/ICP	
214805-006		Filtrate	50	50	1	1.0						NI	
214858-002		Filtrate	50	50	1	1.0						TAL/ICP	
214858-003		Filtrate	50	50	1	1.0						TAL/ICP	
214861-002		Filtrate	50	50	1	1.0						TAL/ICP	
214861-003		Filtrate	50	50	1	1.0						TAL/ICP	
214861-004		Filtrate	50	50	1	1.0						TAL/ICP	
214861-005		Filtrate	50	50	1	1.0						TAL/ICP	
214903-001		Filtrate	50	50	1	1.0						T22/ICP	
214923-005		Filtrate	50	50	1	1.0						NI	
214923-006		Filtrate	50	50	1	1.0						NI	
QC512563	BLANK	Filtrate	50	50	1	1.0							
QC512564	BS	Filtrate	50	50	1	1.0		.5	.5				
QC512565	BSD	Filtrate	50	50	1	1.0		.5	.5				
QC512566	MS	Filtrate	50	50	1	1.0		.5	.5				
QC512567	MSD	Filtrate	50	50	1	1.0		.5	.5				
QC512568	SER	Filtrate	50	50	1	1.0							
QC512569	PDS	Filtrate	50	50	1	1.0							

Reviewed by: AH Date: 09/22/09

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 155039
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☐ EPA 3010a for ICP
☐ EPA 200.7
☒ Filter Prep

BK2931
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Continued From: ∅
Continued On: ∅

	Sample #	Container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK 512563	QC	50	50	n	
*	BS 4					
*	BSD 5					
*	214785-002 MS	M				
*	- 003 MSD					
	- 002	G				
	- 003	M				
	214805-006	D				
	214858-002	A				
10	003	G				
	214861-002	G				
	- 003					
	- 004					
	- 005					
15	214903-001	G				
	214923-005	D				
	- 006					
20						

	Reagent ID or LIMS #	Initials / Date
Digestion Tube Lot #	179714-261-	
0.5 mL of spike solution (Std1) was added to all spikes	512560 *	VV 9-17-09
0.5 mL of spike solution (Std2) was added to all spikes	512557 *	
Digestion temperature (90-95 degrees C)		
Digestion started at (time)	—	
☐ 1:1 HNO3, ☒ concentrated HNO3, added to all samples	H7022-JT Baker	
1:1 HCl added to all samples	4108100-Fisher	
Digestion ended at (time)	-	
☐ filtered thru' Whatman # 541	-	
Relinquished to ICP group		

VV 9-17-09
Prep Chemist Signature / Date

9/17/09
Reviewer Signature / Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214924
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091509A	214924-001
ASE-60A-9C1	214924-002
ASE-73A-9C1	214924-003
ASE-85A-9C1	214924-004
BC-17-9C1	214924-005
ASE-70A-9C1	214924-006
PL-520-9C1	214924-007
ASE-76A-9C1	214924-008
ASE-76B-9C1	214924-009
PL-522-9C1	214924-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/02/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214924**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 09/16/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low responses were observed for tert-butylbenzene and 2-hexanone in the CCV analyzed 09/26/09 15:32; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for n-butylbenzene; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low recovery was observed for vinyl acetate in the LCS for batch 155349. High recoveries were observed for n-butylbenzene and iodomethane; these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for many analytes in the MS/MSD of ASE-76A-9C1 (lab # 214924-008); the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):
High response was observed for 1,4-dioxane in the CCV analyzed 09/25/09 12:12; affected data was qualified with "b".

No other analytical problems were encountered.

Metals (EPA 6010B, EPA 6020, and EPA 7470A):
No analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
Low recoveries were observed for hexavalent chromium in the MS/MSD of ASE-23B-9C1 (lab # 214922-003); the LCS was within limits, and the associated RPD was within limits.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214924**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

Hexavalent Chromium (EPA 7196A):
No other analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Chain of Custody

214924

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Sampler: M. Weise - D. Foehr
PO #: 5101516
Analysis Turnaround Time (TAT): 14 Consultant
Full Report TAT: 14

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1				TB-091509A	9.15.09	0500				1			X														
2				ASE-60A-9C1		0552				8			X	X	X	X	X	X	X								
3				ASE-73A-9C1		0648				8			X	X	X	X	X	X	X								
4				ASE-85A-9C1		0750				8			X	X	X	X	X	X	X								
5				BC-17-9C1		0905				8	1 hr		X	X	X	X	X	X	X								
6				ASE-70A-9C1		0957				8			X	X	X	X	X	X	X								
7				PL-520-9C1		1007				8			X	X	X	X	X	X	X								
8				ASE-76A-9C1		1134				9			X												X		
9				ASE-76B-9C1		1233				8			X	X	X	X	X	X	X								
10				PL-522-9C1		1250				3			X														
11																											
12																											

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
	H+A	09/15/09 16:00		FOEX	09/15/09 16:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
					9/16/09 10:00			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214924 Date Received 9-16-9 Number of coolers 2
Client Honeywell Project Quarterly UST

Date Opened 9-16-9 By (print) Sevan S (sign) [illegible]
Date Logged in [illegible] By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) FedEx# YES NO
   Shipping info Insit: 8630 5639 5041

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name — Date 9-15-9
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 5.0, 3.5

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 214924

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-60A-9C1	Batch#:	155075
Matrix:	Water	Sampled:	09/15/09
Units:	ug/L	Received:	09/16/09
Diln Fac:	1.000	Prepared:	09/18/09

Type: SAMPLE Analyzed: 09/25/09
Lab ID: 214924-002

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Type: BLANK Analyzed: 09/23/09
Lab ID: QC512696

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512697	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,471	99	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-99A-9C1	Batch#:	155075
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Prepared:	09/18/09
Diln Fac:	1.000	Analyzed:	09/23/09

Type: MS Lab ID: QC512698

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	<16.22	2,500	2,452	98	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Type: MSD Lab ID: QC512699

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,407	96	54-120	2	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512700	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,680	107	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626079 File : 264b079 Time : 22-SEP-2009 21:29
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42883	500.0	498.3	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67438	50.00	47.57	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169380626080 File : 264b080 Time : 22-SEP-2009 21:57
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57446	500.0	500.8	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	63359	50.00	44.70	mg/L	-11	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626096 File : 264b096 Time : 23-SEP-2009 05:25
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43307	500.0	503.2	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67479	50.00	47.60	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169380626097 File : 264b097 Time : 23-SEP-2009 05:53
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56996	250.0	248.4	mg/L	-1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	58264	50.00	41.10	mg/L	**-18**	15	c-

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365004 File : 268a004 Time : 25-SEP-2009 08:48
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42856	500.0	498.0	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	66438	50.00	46.87	mg/L	-6	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: JDG Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169386365005 File : 268a005 Time : 25-SEP-2009 09:16
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	51988	500.0	453.2	mg/L	-9	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	52421	50.00	36.98	mg/L	**-26**	15	c-

Analyst: JDG Date: 09/28/09 Reviewer: EAH Date: 09/29/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365021 File : 268a021 Time : 25-SEP-2009 17:20
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43179	500.0	501.7	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67373	50.00	47.53	mg/L	-5	15	

JDG 09/27/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 169386365022 File : 268a022 Time : 25-SEP-2009 17:48
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	59293	1000	1034	mg/L	3	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	64196	50.00	45.29	mg/L	-9	15	

JDG 09/27/09 : Separated from coeluting peak.

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264b001	X	PRIMER				09/21/09 07:46	1.0		
002	264b002	X	IB				09/21/09 08:14	1.0		
003	264b003	X	C8-C50				09/21/09 08:42	1.0	1	
004	264b004	X	DSL_250				09/21/09 09:10	1.0	2	
005	264b005	X	MO_500				09/21/09 09:38	1.0	3	
006	264b006	X	DSL_250				09/21/09 11:34	1.0	2	
007	264b007	X	BUNK_500				09/21/09 12:02	1.0	4	
008	264b008	X	MO_500				09/21/09 12:31	1.0	3	
009	264b009	X	IB				09/21/09 13:57	1.0		
010	264b010	CMARKER	CMARKER				09/21/09 14:25	1.0	1	
011	264b011	CCV	MO_500				09/21/09 14:53	1.0	3	
012	264b012	CCV	DSL_250				09/21/09 15:21	1.0	2	
013	264b013	CCV	BUNK_500				09/21/09 16:17	1.0	4	
014	264b014	BLANK	QC512806	S	Soil	155101	09/21/09 17:05	1.0		
015	264b015	LCS	QC512812	S	Soil	155101	09/21/09 17:33	1.0		
016	264b016	MSS	214977-001	S	Soil	155101	09/21/09 18:01	1.0		
017	264b017	MS	QC512808	S	Soil	155101	09/21/09 18:29	1.0		
018	264b018	MSD	QC512809	S	Soil	155101	09/21/09 18:57	1.0		
019	264b019	MSS	214978-001	S	Soil	155101	09/21/09 19:24	1.0		
020	264b020	MS	QC512810	S	Soil	155101	09/21/09 19:52	1.0		
021	264b021	MSD	QC512811	S	Soil	155101	09/21/09 20:20	1.0		
022	264b022	SAMPLE	214977-003	S	Soil	155101	09/21/09 20:48	5.0		
023	264b023	X	IB				09/21/09 21:16	1.0		
024	264b024	SAMPLE	214977-002	S	Soil	155101	09/21/09 21:44	1.0		
025	264b025	CCV	MO_500				09/21/09 22:11	1.0	3	
026	264b026	CCV	DSL_500				09/21/09 22:39	1.0	5	
027	264b027	CCV	BUNK_500				09/21/09 23:07	1.0	4	
028	264b028	X	CCV				09/21/09 23:35	1.0	3	
029	264b029	X	CCV				09/22/09 00:03	1.0	5	
030	264b030	X	CCV				09/22/09 00:31	1.0	4	
031	264b031	SAMPLE	214977-004	S	Soil	155101	09/22/09 00:58	1.0		
032	264b032	SAMPLE	214977-005	S	Soil	155101	09/22/09 01:26	5.0		
033	264b033	SAMPLE	214977-006	S	Soil	155101	09/22/09 01:54	1.0		
034	264b034	SAMPLE	214977-007	S	Soil	155101	09/22/09 02:22	5.0		
035	264b035	SAMPLE	214977-008	S	Soil	155101	09/22/09 02:49	1.0		
036	264b036	SAMPLE	214978-003	S	Soil	155101	09/22/09 03:17	1.0		
045	264b045	X	CCV				09/22/09 03:47	1.0	3	
046	264b046	X	CCV				09/22/09 04:15	1.0	6	
047	264b047	X	CCV				09/22/09 04:43	1.0	4	
048	264b048	SAMPLE	214978-006	S	Soil	155101	09/22/09 05:11	1.0		
049	264b049	SAMPLE	214978-007	S	Soil	155101	09/22/09 05:39	1.0		
050	264b050	CCV	MO_500				09/22/09 06:07	1.0	3	
051	264b051	CCV	DSL_250				09/22/09 06:35	1.0	2	
052	264b052	CCV	BUNK_500				09/22/09 07:02	1.0	4	
053	264b053	SAMPLE	214978-002	S	Soil	155101	09/22/09 08:01	1.0		
054	264b054	SAMPLE	214978-005	S	Soil	155101	09/22/09 08:29	1.0		
055	264b055	SAMPLE	214978-004	S	Soil	155101	09/22/09 08:56	1.0		
056	264b056	SAMPLE	214978-008	S	Soil	155101	09/22/09 09:24	1.0		
057	264b057	X	IB				09/22/09 10:20	1.0		
058	264b058	SAMPLE	214988-001		Water	155106	09/22/09 10:48	1.0		1:BUNKC:12-40=7000
059	264b059	SAMPLE	214988-002		Water	155106	09/22/09 11:15	1.0		1:BUNKC:12-40=7000
060	264b060	SAMPLE	214990-001		Soil	155134	09/22/09 12:24	3.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B Begun : 09/21/09 07:46
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
061	264b061	SAMPLE	214990-004		Soil	155134	09/22/09 12:57	3.0		
062	264b062	SAMPLE	214990-003		Soil	155134	09/22/09 13:26	3.0		
063	264b063	SAMPLE	214990-005		Soil	155134	09/22/09 13:53	3.0		
064	264b064	CCV	MO_500				09/22/09 14:21	1.0	3	
065	264b065	CCV	DSL_1000				09/22/09 14:49	1.0	6	
066	264b066	CCV	BUNK_500				09/22/09 15:17	1.0	4	
067	264b067	CMARKER	CMARKER				09/22/09 15:45	1.0	1	
068	264b068	MS	QC512808	S	Soil	155101	09/22/09 16:22	1.0		
069	264b069	MSD	QC512809	S	Soil	155101	09/22/09 16:50	1.0		
070	264b070	SAMPLE	215017-005		Water	155106	09/22/09 17:18	2.0		
071	264b071	MSS	214910-001		Soil	155134	09/22/09 17:46	1.0		
072	264b072	SAMPLE	214910-003		Soil	155134	09/22/09 18:14	1.0		
073	264b073	X	IB				09/22/09 18:42	1.0		
074	264b074	SAMPLE	215004-001	S	Water	155106	09/22/09 19:10	1.0		
075	264b075	SAMPLE	214959-010	S	Water	155106	09/22/09 19:38	1.0		
076	264b076	SAMPLE	214910-002		Soil	155134	09/22/09 20:06	1.0		
077	264b077	SAMPLE	214959-005	S	Water	155074	09/22/09 20:34	1.0		
078	264b078	SAMPLE	214959-006	S	Water	155074	09/22/09 21:01	1.0		
079	264b079	CCV	MO_500				09/22/09 21:29	1.0	3	
080	264b080	CCV	DSL_500				09/22/09 21:57	1.0	5	
081	264b081	CCV	BUNK_500				09/22/09 22:25	1.0	4	
082	264b082	X	CCV				09/22/09 22:53	1.0	3	
083	264b083	X	CCV				09/22/09 23:21	1.0	5	
084	264b084	X	CCV				09/22/09 23:50	1.0	4	
085	264b085	SAMPLE	214959-007	S	Water	155074	09/23/09 00:18	1.0		
086	264b086	SAMPLE	214959-008	S	Water	155074	09/23/09 00:46	1.0		
087	264b087	SAMPLE	214959-009	S	Water	155074	09/23/09 01:13	1.0		
088	264b088	BLANK	QC512696		Water	155075	09/23/09 01:41	1.0		
089	264b089	LCS	QC512697		Water	155075	09/23/09 02:09	1.0		
090	264b090	LCS	QC512700		Water	155075	09/23/09 02:37	1.0		
091	264b091	MSS	214851-009		Water	155075	09/23/09 03:05	1.0		
092	264b092	MS	QC512698		Water	155075	09/23/09 03:33	1.0		
093	264b093	MSD	QC512699		Water	155075	09/23/09 04:01	1.0		
094	264b094	SAMPLE	214903-001	S	Water	154973	09/23/09 04:29	1.0		
095	264b095	X	CMARKER				09/23/09 04:57	1.0	1	
096	264b096	CCV	MO_500				09/23/09 05:25	1.0	3	
097	264b097	CCV	DSL_250				09/23/09 05:53	1.0	2	
098	264b098	X	CCV				09/23/09 06:21	1.0	3	
099	264b099	X	CCV				09/23/09 06:49	1.0	2	
100	264b100	X	X			155220	09/24/09 11:01	10.0		

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 52.

JDG 09/22/09 : 37- 44 did not run.

TFB 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 53 through 66.

JDG 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 67 through 99.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

Standards used: 1=S11248 2=S12545 3=S12822 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169386365

Instrument : GC15B Begun : 09/25/09 07:25
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	268a001	X	PRIMER				09/25/09 07:25	1.0		
002	268a002	X	IB				09/25/09 07:53	1.0		
003	268a003	X	CMARKER				09/25/09 08:20	1.0	1	
004	268a004	CCV	MO_500				09/25/09 08:48	1.0	2	
005	268a005	CCV	DSL_500				09/25/09 09:16	1.0	3	
006	268a006	X	QC512558	S	Water	155038	09/25/09 09:44	1.0		
007	268a007	X	QC512559	S	Water	155038	09/25/09 10:12	1.0		
008	268a008	X	QC512560	S	Water	155038	09/25/09 10:40	1.0		
009	268a009	X	QC512561	S	Water	155038	09/25/09 11:07	1.0		
010	268a010	X	QC512562	S	Water	155038	09/25/09 11:35	1.0		
011	268a011	SAMPLE	214922-004		Water	155075	09/25/09 12:40	1.0		
012	268a012	SAMPLE	214922-005		Water	155075	09/25/09 13:08	1.0		
013	268a013	SAMPLE	214923-009		Water	155075	09/25/09 13:36	1.0		
014	268a014	SAMPLE	214924-002		Water	155075	09/25/09 14:04	1.0		
015	268a015	SAMPLE	214925-007		Water	155075	09/25/09 14:31	1.0		
016	268a016	SAMPLE	214925-009		Water	155075	09/25/09 14:59	1.0		
017	268a017	SAMPLE	214925-010		Water	155075	09/25/09 15:27	1.0		
018	268a018	SAMPLE	214980-001		Soil	155270	09/25/09 15:55	1.0		
019	268a019	SAMPLE	214980-004		Soil	155270	09/25/09 16:23	1.0		
020	268a020	SAMPLE	214980-005		Soil	155270	09/25/09 16:52	1.0		
021	268a021	CCV	MO_500				09/25/09 17:20	1.0	2	
022	268a022	CCV	DSL_1000				09/25/09 17:48	1.0	4	
023	268a023	X	CCV				09/25/09 18:16	1.0	2	
024	268a024	X	CCV				09/25/09 18:44	1.0	4	
025	268a025	BLANK	QC513372		Water	155238	09/25/09 19:12	1.0		
026	268a026	SAMPLE	215034-001		Water	155238	09/25/09 19:40	1.0		
027	268a027	SAMPLE	215034-002		Water	155238	09/25/09 20:07	1.0		
028	268a028	SAMPLE	215034-003		Water	155238	09/25/09 20:35	1.0		
029	268a029	SAMPLE	215034-004		Water	155238	09/25/09 21:03	1.0		
030	268a030	SAMPLE	215034-005		Water	155238	09/25/09 21:31	1.0		
031	268a031	SAMPLE	215034-006		Water	155238	09/25/09 21:58	1.0		
032	268a032	SAMPLE	215034-007		Water	155238	09/25/09 22:26	1.0		
033	268a033	SAMPLE	215034-008		Water	155238	09/25/09 22:54	1.0		
034	268a034	SAMPLE	215118-001		Water	155238	09/25/09 23:22	1.0		
035	268a035	X	CMARKER				09/25/09 23:49	1.0	5	
036	268a036	CCV	DSL_500				09/26/09 00:16	1.0	3	
037	268a037	CCV	MO_500				09/26/09 00:43	1.0	2	
038	268a038	X	CCV				09/26/09 01:11	1.0	3	
039	268a039	X	CCV				09/26/09 01:39	1.0	2	

JDG 09/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S11248 2=S12822 3=S12546 4=S12547 5=S11825

SAMPLE PREPARATION SUMMARY

Batch # : 155075 Analysis : TEH
Started By : SFL Prep Date : 18-SEP-2009 16:45 Finished By : SFL
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12972 Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214851-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-009		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
214851-010		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-011		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-012		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-013		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-014		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-015		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-016		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-017		Water	500	2.5	1	0.005	7	.5				TEHM	
214881-001		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214923-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214924-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-010		Water	500	2.5	1	0.005	7	.5				TEHM	
QC512696	BLANK	Water	500	2.5	1	0.005		.5					
QC512697	LCS	Water	500	2.5	1	0.005		.5	.5				
QC512698	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC512699	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC512700	LCS	Water	500	2.5	1	0.005		.5		.5			

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

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LIMS Batch No: 155075
LIMS Analysis: TEH
Date Extracted: 9/18/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☐ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214851-003	D	500	7	2.5		
5	E					
9	L					MSS
10	D					
11						
12						
13						
14						
15						
16						
17						
214881-001						
214922-004	I					
05						
214923-009	D					
214924-002	H					
214925-007	D					
9						
10						
MB DCS 9/20/09						
LCS 97						
MS 98	K		7			
MSD 99						
LCS 100						MO *

SFL 9/20/09

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	512934B	SFL 9/18/09
0.5/0.5X mL of TEH_SP was added to all spikes	512972B/512290C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F0093334	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1645	
Extraction End Time:	12:25	SFL 9/19/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SFL 9/20/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49001904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/18/09

Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

9/21/09

Reviewed by **Date**

Laboratory Job Number 214924

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091509A	Batch#:	155349
Lab ID:	214924-001	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091509A	Batch#:	155349
Lab ID:	214924-001	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-60A-9C1	Batch#:	155349
Lab ID:	214924-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	1.3	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	6.2	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	5.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.9	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-60A-9C1	Batch#:	155349
Lab ID:	214924-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73A-9C1	Batch#:	155349
Lab ID:	214924-003	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	1.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	5.8	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.1	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	4.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73A-9C1	Batch#:	155349
Lab ID:	214924-003	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-85A-9C1	Batch#:	155349
Lab ID:	214924-004	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	3.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	6.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	4.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.9	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	22	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	4.8	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-85A-9C1	Batch#:	155349
Lab ID:	214924-004	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	105	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-17-9C1	Batch#:	155349
Lab ID:	214924-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	0.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-17-9C1	Batch#:	155349
Lab ID:	214924-005	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-70A-9C1	Batch#:	155349
Lab ID:	214924-006	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.4	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	4.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-70A-9C1	Batch#:	155349
Lab ID:	214924-006	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	109	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-520-9C1	Batch#:	155349
Lab ID:	214924-007	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.4	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	4.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-520-9C1	Batch#:	155349
Lab ID:	214924-007	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/26/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	M1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 M1
Acetone	ND	10	
1,1-Dichloroethene	1.3	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	M1
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	1.0	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	M1
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	M1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 M1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	M1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76B-9C1	Batch#:	155349
Lab ID:	214924-009	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	2.500		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.5	D2
Chloromethane	ND	2.5	D2
Vinyl Chloride	ND	1.3	D2
Bromomethane	ND	2.5	D2
Chloroethane	ND	2.5	D2
Trichlorofluoromethane	ND	2.5	D2
Iodomethane	ND	25	D2 L1
Acetone	ND	25	D2
1,1-Dichloroethene	33	1.3	D2
Methylene Chloride	ND	25	D2
Carbon Disulfide	ND	1.3	D2
MTBE	ND	1.3	D2
trans-1,2-Dichloroethene	ND	1.3	D2
Vinyl Acetate	ND	25	D2 L2
1,1-Dichloroethane	7.1	1.3	D2
2-Butanone	ND	25	D2
cis-1,2-Dichloroethene	42	1.3	D2
2,2-Dichloropropane	ND	1.3	D2
Chloroform	ND	1.3	D2
Bromochloromethane	ND	1.3	D2
1,1,1-Trichloroethane	ND	1.3	D2
1,1-Dichloropropene	ND	1.3	D2
Carbon Tetrachloride	ND	1.3	D2
1,2-Dichloroethane	ND	1.3	D2
Benzene	ND	1.3	D2
Trichloroethene	190	1.3	D2
1,2-Dichloropropane	ND	1.3	D2
Bromodichloromethane	ND	1.3	D2
Dibromomethane	ND	1.3	D2
4-Methyl-2-Pentanone	ND	25	D2
cis-1,3-Dichloropropene	ND	1.3	D2
Toluene	ND	1.3	D2
trans-1,3-Dichloropropene	ND	1.3	D2
1,1,2-Trichloroethane	ND	1.3	D2
2-Hexanone	ND	25	D2 V9
1,3-Dichloropropane	ND	1.3	D2
Tetrachloroethene	ND	1.3	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76B-9C1	Batch#:	155349
Lab ID:	214924-009	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	2.500		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.3	D2
1,2-Dibromoethane	ND	1.3	D2
Chlorobenzene	ND	1.3	D2
1,1,1,2-Tetrachloroethane	ND	1.3	D2
Ethylbenzene	ND	1.3	D2
m,p-Xylenes	ND	1.3	D2
o-Xylene	ND	1.3	D2
Styrene	ND	1.3	D2
Bromoform	ND	2.5	D2
Isopropylbenzene	ND	1.3	D2
1,1,2,2-Tetrachloroethane	ND	1.3	D2
1,2,3-Trichloropropane	ND	1.3	D2
Propylbenzene	ND	1.3	D2
Bromobenzene	ND	1.3	D2
1,3,5-Trimethylbenzene	ND	1.3	D2
2-Chlorotoluene	ND	1.3	D2
4-Chlorotoluene	ND	1.3	D2
tert-Butylbenzene	ND	1.3	D2 V9
1,2,4-Trimethylbenzene	ND	1.3	D2
sec-Butylbenzene	ND	1.3	D2
para-Isopropyl Toluene	ND	1.3	D2
1,3-Dichlorobenzene	ND	1.3	D2
1,4-Dichlorobenzene	ND	1.3	D2
n-Butylbenzene	ND	1.3	D2 L1 V1
1,2-Dichlorobenzene	ND	1.3	D2
1,2-Dibromo-3-Chloropropane	ND	5.0	D2
1,2,4-Trichlorobenzene	ND	1.3	D2
Hexachlorobutadiene	ND	5.0	D2
Naphthalene	ND	5.0	D2
1,2,3-Trichlorobenzene	ND	1.3	D2
Xylene (total)	ND	1.3	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-522-9C1	Batch#:	155349
Lab ID:	214924-010	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-522-9C1	Batch#:	155349
Lab ID:	214924-010	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	107	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513820	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513820	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513821	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	21.25	24.52	115	56-140	
Chloromethane	21.25	20.02	94	46-142	
Vinyl Chloride	21.25	20.30	96	49-136	
Bromomethane	21.25	25.47	120	42-154	
Chloroethane	21.25	21.50	101	51-133	
Trichlorofluoromethane	21.25	20.32	96	63-135	
Iodomethane	21.25	29.77	140 *	70-130	L1
Acetone	21.25	21.36	100	48-130	
1,1-Dichloroethene	21.25	22.47	106	68-133	
Methylene Chloride	21.25	21.68	102	71-120	
Carbon Disulfide	21.25	20.77	98	56-120	
MTBE	21.25	20.92	98	58-120	
trans-1,2-Dichloroethene	21.25	23.23	109	80-120	
Vinyl Acetate	21.25	12.46	59 *	63-124	L2
1,1-Dichloroethane	21.25	21.60	102	77-120	
2-Butanone	21.25	20.28	95	57-120	
cis-1,2-Dichloroethene	21.25	22.01	104	75-120	
2,2-Dichloropropane	21.25	19.48	92	72-128	
Chloroform	21.25	20.27	95	78-120	
Bromochloromethane	21.25	22.11	104	78-120	
1,1,1-Trichloroethane	21.25	21.71	102	78-120	
1,1-Dichloropropene	21.25	20.22	95	75-120	
Carbon Tetrachloride	21.25	19.34	91	80-120	
1,2-Dichloroethane	21.25	18.30	86	74-120	
Benzene	21.25	20.72	97	77-120	
Trichloroethene	21.25	21.97	103	78-122	
1,2-Dichloropropane	21.25	20.04	94	76-120	
Bromodichloromethane	21.25	19.99	94	78-120	
Dibromomethane	21.25	19.98	94	77-120	
4-Methyl-2-Pentanone	21.25	17.17	81	65-120	
cis-1,3-Dichloropropene	21.25	21.19	100	76-120	
Toluene	21.25	19.20	90	73-120	
trans-1,3-Dichloropropene	21.25	17.49	82	72-120	
1,1,2-Trichloroethane	21.25	20.10	95	76-120	
2-Hexanone	21.25	16.24 b	76	57-121	V9
1,3-Dichloropropane	21.25	19.84	93	75-120	
Tetrachloroethene	21.25	18.69	88	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513821	Batch#:	155349
Matrix:	Water	Analyzed:	09/26/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	21.25	18.94	89	76-120	
1,2-Dibromoethane	21.25	19.69	93	77-120	
Chlorobenzene	21.25	18.89	89	78-120	
1,1,1,2-Tetrachloroethane	21.25	18.50	87	77-120	
Ethylbenzene	21.25	19.37	91	78-120	
m,p-Xylenes	42.50	37.72	89	77-120	
o-Xylene	21.25	18.18	86	77-120	
Styrene	21.25	18.47	87	77-120	
Bromoform	21.25	17.72	83	74-121	
Isopropylbenzene	21.25	18.75	88	71-120	
1,1,2,2-Tetrachloroethane	21.25	19.45	92	73-120	
1,2,3-Trichloropropane	21.25	23.38	110	72-120	
Propylbenzene	21.25	19.15	90	76-120	
Bromobenzene	21.25	21.22	100	75-120	
1,3,5-Trimethylbenzene	21.25	23.09	109	77-120	
2-Chlorotoluene	21.25	21.70	102	76-120	
4-Chlorotoluene	21.25	19.95	94	78-120	
tert-Butylbenzene	21.25	17.34 b	82	76-120	V9
1,2,4-Trimethylbenzene	21.25	24.15	114	77-120	
sec-Butylbenzene	21.25	17.85	84	80-120	
para-Isopropyl Toluene	21.25	20.81	98	76-120	
1,3-Dichlorobenzene	21.25	19.57	92	75-120	
1,4-Dichlorobenzene	21.25	18.79	88	77-120	
n-Butylbenzene	21.25	29.05 b	137 *	76-120	L1 V3
1,2-Dichlorobenzene	21.25	20.01	94	76-120	
1,2-Dibromo-3-Chloropropane	21.25	20.02	94	65-120	
1,2,4-Trichlorobenzene	21.25	21.43	101	73-121	
Hexachlorobutadiene	21.25	18.29	86	73-123	
Naphthalene	21.25	24.71	116	62-121	
1,2,3-Trichlorobenzene	21.25	22.66	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	89	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513822

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	35.81	143 *	56-140	M1
Chloromethane	<0.2000	25.00	29.99	120	46-142	
Vinyl Chloride	<0.1000	25.00	30.20	121	49-136	
Bromomethane	<0.2000	25.00	33.66	135	42-154	
Chloroethane	<0.2000	25.00	30.90	124	51-133	
Trichlorofluoromethane	<0.2000	25.00	30.63	123	63-135	
Iodomethane	<2.000	25.00	38.06	152 *	60-140	M1
Acetone	<1.000	25.00	26.98	108	48-130	
1,1-Dichloroethene	1.287	25.00	32.06	123	68-133	
Methylene Chloride	0.1569	25.00	28.79	115	71-120	
Carbon Disulfide	<0.1000	25.00	29.08	116	56-120	
MTBE	<0.1000	25.00	27.86	111	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	31.53	126 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.78	83	63-124	
1,1-Dichloroethane	0.9899	25.00	30.97	120	77-120	
2-Butanone	<2.000	25.00	25.41	102	57-120	
cis-1,2-Dichloroethene	0.2039	25.00	29.22	116	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.10	108	72-128	
Chloroform	0.3681	25.00	28.38	112	78-120	
Bromochloromethane	<0.1000	25.00	29.53	118	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	31.00	124 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	28.03	112	75-120	
Carbon Tetrachloride	<0.1000	25.00	27.52	110	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.12	100	74-120	
Benzene	<0.1000	25.00	27.56	110	77-120	
Trichloroethene	0.9793	25.00	29.45	114	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.30	105	76-120	
Bromodichloromethane	0.1105	25.00	27.10	108	78-120	
Dibromomethane	<0.1000	25.00	25.97	104	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.90	88	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	27.65	111	76-120	
Toluene	<0.1000	25.00	24.84	99	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	22.30	89	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.32	101	76-120	
2-Hexanone	<2.000	25.00	18.55 b	74	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.44	102	75-120	
Tetrachloroethene	0.2454	25.00	24.17	96	77-120	
Dibromochloromethane	<0.1000	25.00	24.19	97	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.34	97	77-120	
Chlorobenzene	<0.1000	25.00	23.98	96	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	23.91	96	77-120	
Ethylbenzene	<0.1000	25.00	25.42	102	78-120	
m,p-Xylenes	<0.1594	50.00	48.12	96	77-120	
o-Xylene	<0.1000	25.00	23.08	92	77-120	
Styrene	<0.1000	25.00	22.53	90	77-120	
Bromoform	<0.2000	25.00	21.93	88	74-121	
Isopropylbenzene	<0.1000	25.00	23.47	94	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.50	102	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	29.35	117	72-120	
Propylbenzene	<0.1000	25.00	24.41	98	76-120	
Bromobenzene	<0.1000	25.00	25.89	104	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	29.44	118	77-120	
2-Chlorotoluene	<0.1000	25.00	27.61	110	76-120	
4-Chlorotoluene	<0.1000	25.00	25.17	101	78-120	
tert-Butylbenzene	<0.1000	25.00	22.17 b	89	76-120	V9
1,2,4-Trimethylbenzene	<0.1000	25.00	30.24	121 *	77-120	M1
sec-Butylbenzene	<0.1029	25.00	23.63	95	80-120	
para-Isopropyl Toluene	<0.1000	25.00	27.06	108	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.15	97	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	23.35	93	77-120	
n-Butylbenzene	<0.1285	25.00	40.51 b	162 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	24.56	98	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.86	99	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	26.29	105	73-121	
Hexachlorobutadiene	<0.4000	25.00	24.57	98	73-123	
Naphthalene	<0.4000	25.00	29.87	119	62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	27.97	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513823

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	33.88	136	56-140	6	24	
Chloromethane	25.00	29.12	116	46-142	3	24	
Vinyl Chloride	25.00	28.75	115	49-136	5	24	
Bromomethane	25.00	33.61	134	42-154	0	24	
Chloroethane	25.00	28.29	113	51-133	9	25	
Trichlorofluoromethane	25.00	27.70	111	63-135	10	20	
Iodomethane	25.00	38.44	154 *	60-140	1	30	M1
Acetone	25.00	25.45	102	48-130	6	41	
1,1-Dichloroethene	25.00	29.72	114	68-133	8	20	
Methylene Chloride	25.00	27.75	110	71-120	4	20	
Carbon Disulfide	25.00	26.74	107	56-120	8	20	
MTBE	25.00	26.71	107	58-120	4	21	
trans-1,2-Dichloroethene	25.00	29.53	118	80-120	7	24	
Vinyl Acetate	25.00	19.93	80	63-124	4	24	
1,1-Dichloroethane	25.00	28.77	111	77-120	7	20	
2-Butanone	25.00	24.05	96	57-120	5	32	
cis-1,2-Dichloroethene	25.00	27.46	109	75-120	6	20	
2,2-Dichloropropane	25.00	24.76	99	72-128	9	24	
Chloroform	25.00	26.48	104	78-120	7	20	
Bromochloromethane	25.00	28.31	113	78-120	4	20	
1,1,1-Trichloroethane	25.00	28.58	114	78-120	8	20	
1,1-Dichloropropene	25.00	26.22	105	75-120	7	21	
Carbon Tetrachloride	25.00	25.46	102	80-120	8	21	
1,2-Dichloroethane	25.00	24.12	96	74-120	4	20	
Benzene	25.00	26.10	104	77-120	5	20	
Trichloroethene	25.00	27.57	106	78-122	7	20	
1,2-Dichloropropane	25.00	25.38	102	76-120	4	20	
Bromodichloromethane	25.00	25.86	103	78-120	5	20	
Dibromomethane	25.00	24.91	100	77-120	4	20	
4-Methyl-2-Pentanone	25.00	21.22	85	65-120	3	22	
cis-1,3-Dichloropropene	25.00	26.68	107	76-120	4	20	
Toluene	25.00	23.45	94	73-120	6	20	
trans-1,3-Dichloropropene	25.00	21.48	86	72-120	4	20	
1,1,2-Trichloroethane	25.00	24.47	98	76-120	3	20	
2-Hexanone	25.00	18.44 b	74	57-121	1	25	V9
1,3-Dichloropropane	25.00	24.57	98	75-120	3	20	
Tetrachloroethene	25.00	22.84	90	77-120	6	20	
Dibromochloromethane	25.00	23.59	94	76-120	2	20	
1,2-Dibromoethane	25.00	23.54	94	77-120	3	20	
Chlorobenzene	25.00	23.32	93	78-120	3	20	
1,1,1,2-Tetrachloroethane	25.00	22.92	92	77-120	4	20	
Ethylbenzene	25.00	24.15	97	78-120	5	26	
m,p-Xylenes	50.00	45.36	91	77-120	6	20	
o-Xylene	25.00	21.72	87	77-120	6	20	
Styrene	25.00	21.26	85	77-120	6	20	
Bromoform	25.00	21.59	86	74-121	2	21	
Isopropylbenzene	25.00	23.07	92	71-120	2	20	
1,1,2,2-Tetrachloroethane	25.00	26.45	106	73-120	4	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-76A-9C1	Batch#:	155349
MSS Lab ID:	214924-008	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/27/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	29.83	119	72-120	2	20	
Propylbenzene	25.00	23.32	93	76-120	5	20	
Bromobenzene	25.00	26.68	107	75-120	3	20	
1,3,5-Trimethylbenzene	25.00	29.16	117	77-120	1	20	
2-Chlorotoluene	25.00	26.97	108	76-120	2	20	
4-Chlorotoluene	25.00	24.51	98	78-120	3	20	
tert-Butylbenzene	25.00	21.17 b	85	76-120	5	21	V9
1,2,4-Trimethylbenzene	25.00	30.33	121 *	77-120	0	20	M1
sec-Butylbenzene	25.00	22.57	90	80-120	5	21	
para-Isopropyl Toluene	25.00	26.65	107	76-120	2	20	
1,3-Dichlorobenzene	25.00	23.71	95	75-120	2	20	
1,4-Dichlorobenzene	25.00	22.99	92	77-120	2	23	
n-Butylbenzene	25.00	39.91 b	160 *	76-120	2	21	M1 V3
1,2-Dichlorobenzene	25.00	24.32	97	76-120	1	20	
1,2-Dibromo-3-Chloropropane	25.00	24.71	99	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	27.58	110	73-121	5	20	
Hexachlorobutadiene	25.00	24.04	96	73-123	2	25	
Naphthalene	25.00	31.45	126 *	62-121	5	32	M1
1,2,3-Trichlorobenzene	25.00	29.24	117	66-123	4	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	116	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214924 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214924 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839387930014 File : kiq14 Time : 26-SEP-2009 15:07

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	31211	16.41	
75	30% - 60% of mass 95	87657	46.10	
95		190142	100.00	
96	5% - 9% of mass 95	13825	7.27	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	137986	72.57	
175	5% - 9% of mass 174	10039	7.28	
176	> 95% and < 101% of mass 174	134626	97.56	
177	5% - 9% of mass 176	9031	6.71	

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/28/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : 15PPB IDF : 1.0
Seqnum : 839387930015.1 File : kiq15 Time : 26-SEP-2009 15:32
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12998 (33330X), S12773 (33330X), S12217 (66670X), S12929 (33330X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5551	15.00	15.55	ug/L	4	20	0.0500	
Chloromethane	0.5160	0.4974	15.00	14.46	ug/L	-4	20	0.1000	
Vinyl Chloride	0.5175	0.5681	15.00	16.47	ug/L	10	20	0.0500	
Bromomethane	0.2608	0.2761	15.00	15.88	ug/L	6	20	0.0500	
Chloroethane	0.4094	0.4163	15.00	15.25	ug/L	2	20	0.0500	
Trichlorofluoromethane	0.7415	0.7880	15.00	15.94	ug/L	6	20	0.0500	
Acetone	0.1382	0.1364	15.00	14.81	ug/L	-1	20	0.0500	
1,1-Dichloroethene	0.3747	0.3861	15.00	15.45	ug/L	3	20	0.0500	
Iodomethane	0.2599	0.2588	15.00	15.95	ug/L	6	20	0.0500	
Methylene Chloride	0.5280	0.5265	15.00	14.96	ug/L	0	20	0.0500	
Carbon Disulfide	1.4090	1.6312	15.00	17.37	ug/L	16	20	0.0500	
MTBE	1.5447	1.6005	15.00	15.54	ug/L	4	20	0.0500	
trans-1,2-Dichloroethene	0.4564	0.4772	15.00	15.68	ug/L	5	20	0.0500	
Vinyl Acetate	0.9726	0.9427	15.00	14.54	ug/L	-3	20	0.0500	
1,1-Dichloroethane	0.9405	0.9244	15.00	14.74	ug/L	-2	20	0.1000	
2-Butanone	0.2331	0.2206	15.00	14.20	ug/L	-5	20	0.0500	
2,2-Dichloropropane	0.7134	0.7419	15.00	15.60	ug/L	4	20	0.0500	
cis-1,2-Dichloroethene	0.5440	0.5432	15.00	14.98	ug/L	0	20	0.0500	
Chloroform	0.9238	0.8401	15.00	13.64	ug/L	-9	20	0.0500	
Bromochloromethane	0.2354	0.2373	15.00	15.12	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.7032	0.6965	15.00	14.86	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.4217	0.3901	15.00	13.88	ug/L	-7	20	0.0500	
Carbon Tetrachloride	0.3483	0.3076	15.00	13.24	ug/L	-12	20	0.0500	
1,2-Dichloroethane	0.4392	0.3652	15.00	12.47	ug/L	-17	20	0.0500	
Benzene	1.3404	1.2788	15.00	14.31	ug/L	-5	20	0.0500	
Trichloroethene	0.3158	0.3021	15.00	14.35	ug/L	-4	20	0.0500	
1,2-Dichloropropane	0.3595	0.3278	15.00	13.68	ug/L	-9	20	0.0500	
Bromodichloromethane	0.3863	0.3431	15.00	13.32	ug/L	-11	20	0.0500	
Dibromomethane	0.1802	0.1654	15.00	13.77	ug/L	-8	20	0.0500	
4-Methyl-2-Pentanone	0.3044	0.2627	15.00	12.95	ug/L	-14	20	0.0500	
cis-1,3-Dichloropropene	0.5168	0.4859	15.00	14.10	ug/L	-6	20	0.0500	
Toluene	0.9593	0.8873	15.00	13.87	ug/L	-8	20	0.0500	
trans-1,3-Dichloropropene	0.5730	0.4965	15.00	13.00	ug/L	-13	20	0.0500	
1,1,2-Trichloroethane	0.1749	0.1585	15.00	13.59	ug/L	-9	20	0.0500	
2-Hexanone	0.2445	0.1924	15.00	11.80	ug/L	**-21**	20	0.0500	c- ***
1,3-Dichloropropane	0.6133	0.5488	15.00	13.42	ug/L	-11	20	0.0500	
Tetrachloroethene	0.3329	0.2836	15.00	12.78	ug/L	-15	20	0.0500	
Dibromochloromethane	0.3027	0.2547	15.00	12.62	ug/L	-16	20	0.0500	
1,2-Dibromoethane	0.3049	0.2690	15.00	13.24	ug/L	-12	20	0.0500	
Chlorobenzene	1.0519	0.9166	15.00	13.07	ug/L	-13	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3358	0.2814	15.00	12.57	ug/L	-16	20	0.0500	
Ethylbenzene	1.8115	1.6001	15.00	13.25	ug/L	-12	20	0.0500	
m,p-Xylenes	0.6304	0.5340	30.00	25.41	ug/L	-15	20	0.0500	
o-Xylene	0.6283	0.5079	15.00	12.13	ug/L	-19	20	0.0500	
Styrene	1.0367	0.8301	15.00	12.01	ug/L	-20	20	0.0500	
Bromoform	0.1849	0.1646	15.00	12.10	ug/L	-19	20	0.1000	
Isopropylbenzene	3.8595	3.7424	15.00	14.54	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9641	15.00	15.08	ug/L	1	20	0.3000	
1,2,3-Trichloropropane	1.0234	1.1144	15.00	16.33	ug/L	9	20	0.0500	
Propylbenzene	3.9448	3.4674	15.00	13.18	ug/L	-12	20	0.0500	
Bromobenzene	1.0220	1.0205	15.00	14.98	ug/L	0	20	0.0500	
1,3,5-Trimethylbenzene	2.7424	2.9967	15.00	16.39	ug/L	9	20	0.0500	
2-Chlorotoluene	3.1099	3.1135	15.00	15.02	ug/L	0	20	0.0500	
4-Chlorotoluene	2.6572	2.4660	15.00	13.92	ug/L	-7	20	0.0500	
tert-Butylbenzene	2.1712	1.6975	15.00	11.73	ug/L	**-22**	20	0.0500	c- ***
1,2,4-Trimethylbenzene	2.6384	3.0081	15.00	17.10	ug/L	14	20	0.0500	
sec-Butylbenzene	3.1284	2.6304	15.00	12.61	ug/L	-16	20	0.0500	
para-Isopropyl Toluene	2.4941	2.5514	15.00	15.34	ug/L	2	20	0.0500	
1,3-Dichlorobenzene	1.6902	1.5296	15.00	13.58	ug/L	-9	20	0.0500	
1,4-Dichlorobenzene	1.6542	1.4474	15.00	13.12	ug/L	-13	20	0.0500	
n-Butylbenzene	2.4331	2.7776	15.00	18.43	ug/L	**23**	20	0.0500	c+ ***
1,2-Dichlorobenzene	1.6119	1.4935	15.00	13.90	ug/L	-7	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1759	0.1642	15.00	14.00	ug/L	-7	20	0.0500	
1,2,4-Trichlorobenzene	1.0876	1.1732	15.00	16.18	ug/L	8	20	0.0500	
Hexachlorobutadiene	0.4373	0.4035	15.00	13.84	ug/L	-8	20	0.0500	
Naphthalene	2.7279	3.1808	15.00	17.49	ug/L	17	20	0.0500	
1,2,3-Trichlorobenzene	1.0079	1.0971	15.00	16.33	ug/L	9	20	0.0500	
Dibromofluoromethane	0.4472	0.4576	50.00	51.17	ug/L	2	20	0.0500	
1,2-Dichloroethane-d4	0.3737	0.3322	50.00	44.45	ug/L	-11	20	0.0500	
Toluene-d8	1.4811	1.4855	50.00	50.15	ug/L	0	20	0.0500	
Bromofluorobenzene	1.2424	1.4422	50.00	58.04	ug/L	16	20	0.0500	

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2566944	70.53	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	4580495	87.19	11.74	11.74	0.00
Chlorobenzene-d5	2136176	4185745	95.95	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1384562	40.78	17.10	17.10	0.00

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/29/09

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839387930

Date : 09/26/09 Reference : kif12
Sequence : MSVOA11 kiq Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
015	CCV	15PPB	2566944	10.81	4580495	11.74	4185745	14.82	1384562	17.10
016	LCS	QC513821	2547431	10.81	4611768	11.74	4237336	14.82	1458511	17.10
018	BLANK	QC513820	2418914	10.81	4437396	11.74	3983696	14.82	1194082	17.10
019	SAMPLE	214924-001	2305976	10.81	4215068	11.74	3796562	14.82	1186307	17.10
020	SAMPLE	214922-003	2250244	10.81	4130606	11.74	3742148	14.82	1121149	17.10
021	SAMPLE	214922-004	2186886	10.81	4013063	11.74	3666289	14.82	1112177	17.10
022	SAMPLE	214922-005	2174196	10.81	4002629	11.74	3641721	14.82	1050900	17.10
023	SAMPLE	214922-007	2184321	10.81	4039751	11.74	3663410	14.82	1131281	17.10
024	SAMPLE	214922-008	2161290	10.81	3985251	11.74	3611224	14.82	1098905	17.10
025	SAMPLE	214922-009	2082585	10.81	3871309	11.74	3528031	14.83	1027428	17.10
026	SAMPLE	214922-010	2038542	10.81	3788334	11.74	3454961	14.82	1057203	17.10
027	SAMPLE	214924-002	1993046	10.81	3712359	11.74	3394033	14.82	1031917	17.10
028	SAMPLE	214924-003	1980537	10.81	3723251	11.74	3385321	14.83	993731	17.10
029	SAMPLE	214924-004	1931640	10.81	3610340	11.74	3309805	14.82	981328	17.10
030	SAMPLE	214924-005	1903792	10.81	3573321	11.74	3292666	14.82	1011522	17.10
031	SAMPLE	214924-006	1879431	10.81	3539471	11.74	3259149	14.82	1016715	17.10
032	SAMPLE	214924-007	1859665	10.81	3507747	11.74	3226916	14.82	971440	17.10
033	MSS	214924-008	1827767	10.81	3455297	11.74	3154138	14.82	945499	17.10
034	SAMPLE	214924-010	1811456	10.81	3428308	11.74	3174677	14.82	1002614	17.09
035	SAMPLE	215054-003	1797791	10.81	3419565	11.74	3186311	14.82	987162	17.10
036	SAMPLE	214923-006	1974126	10.81	3673165	11.74	3441389	14.82	1077600	17.10
037	SAMPLE	214924-009	2065145	10.81	3783103	11.74	3507802	14.82	1067946	17.09
038	MS	QC513822	2043088	10.81	3781965	11.74	3588511	14.82	1278211	17.10
039	MSD	QC513823	2150200	10.81	3926072	11.74	3735956	14.82	1254680	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839387930

Instrument : MSVOA11 Begun : 09/26/09 09:30
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kiq01	X	IB			09/26/09 09:30	1.0	1	
002	kiq02	X	BFB			09/26/09 09:54	1.0	2	
003	kiq03	X	35PPB			09/26/09 10:17	1.0	3 4 5 6 1	1:BTBZN=55
004	kiq04	X	QC513821	Water	155349	09/26/09 10:45	1.0	7 8 9 10 1	
005	kiq05	X	IB			09/26/09 11:14	1.0	1	
006	kiq06	X	BFB			09/26/09 12:04	1.0	2	
007	kiq07	X	BFB			09/26/09 12:15	1.0	2	
008	kiq08	X	BFB			09/26/09 12:31	1.0	2	
009	kiq09	X	15PPB			09/26/09 12:53	1.0	3 4 5 6 1	
010	kiq10	X	QC513821	Water	155349	09/26/09 13:21	1.0	7 8 9 10 1	
011	kiq11	X	BFB			09/26/09 13:49	1.0	2	
012	kiq12	X	15PPB			09/26/09 14:11	1.0	3 4 5 6 1	
013	kiq13	X	QC513821	Water	155349	09/26/09 14:39	1.0	3 8 9 11 1	
014	kiq14	TUN	BFB			09/26/09 15:07	1.0	2	
015	kiq15	CCV	15PPB			09/26/09 15:32	1.0	3 4 5 6 1	
016	kiq16	LCS	QC513821	Water	155349	09/26/09 16:08	1.0	7 8 9 10 1	
017	kiq17	X	IB			09/26/09 16:37	1.0	1	
018	kiq18	BLANK	QC513820	Water	155349	09/26/09 17:05	1.0	1	
019	kiq19	SAMPLE	214924-001	Water	155349	09/26/09 17:33	1.0	1	
020	kiq20	SAMPLE	214922-003	Water	155349	09/26/09 18:01	1.0	1	
021	kiq21	SAMPLE	214922-004	Water	155349	09/26/09 18:30	1.0	1	
022	kiq22	SAMPLE	214922-005	Water	155349	09/26/09 18:58	1.0	1	
023	kiq23	SAMPLE	214922-007	Water	155349	09/26/09 19:26	1.0	1	
024	kiq24	SAMPLE	214922-008	Water	155349	09/26/09 19:55	1.0	1	
025	kiq25	SAMPLE	214922-009	Water	155349	09/26/09 20:23	1.0	1	
026	kiq26	SAMPLE	214922-010	Water	155349	09/26/09 20:51	1.0	1	
027	kiq27	SAMPLE	214924-002	Water	155349	09/26/09 21:20	1.0	1	
028	kiq28	SAMPLE	214924-003	Water	155349	09/26/09 21:48	1.0	1	
029	kiq29	SAMPLE	214924-004	Water	155349	09/26/09 22:16	1.0	1	
030	kiq30	SAMPLE	214924-005	Water	155349	09/26/09 22:44	1.0	1	
031	kiq31	SAMPLE	214924-006	Water	155349	09/26/09 23:13	1.0	1	
032	kiq32	SAMPLE	214924-007	Water	155349	09/26/09 23:41	1.0	1	
033	kiq33	MSS	214924-008	Water	155349	09/27/09 00:09	1.0	1	
034	kiq34	SAMPLE	214924-010	Water	155349	09/27/09 00:38	1.0	1	
035	kiq35	SAMPLE	215054-003	Water	155349	09/27/09 01:06	1.0	1	pH > 2
036	kiq36	SAMPLE	214923-006	Water	155349	09/27/09 01:34	2.0	1	
037	kiq37	SAMPLE	214924-009	Water	155349	09/27/09 02:03	2.500	1	
038	kiq38	MS	QC513822	Water	155349	09/27/09 02:31	1.0	7 8 9 10 1	
039	kiq39	MSD	QC513823	Water	155349	09/27/09 02:59	1.0	7 8 9 10 1	
040	kiq40	X	IB			09/27/09 03:27	1.0	1	
041	kiq41	X	IB			09/27/09 03:56	1.0	1	
042	kiq42	X	IB			09/27/09 04:24	1.0	1	

TEW 09/26/09 : Adjusted tune prior to file kiq06.

TEW 09/26/09 : File kiq05 was an IB. I updated the sequence after the ccv & lcs failed but mistakenly overwrote file 05 as the new tune.

TEW 09/26/09 : Adjusted tune prior to file kiq08.

TEW 09/26/09 : Adjusted tune prior to file kiq11.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839387930

Instrument : MSVOA11 Begun : 09/26/09 09:30
Method : EPA 8260B SOP Version : TVH_8260B_rv0

TEW 09/26/09 : Adjusted tune prior to file kiq14.

MJD 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Analyst: MJD Date: 09/28/09 Reviewer: LW Date: 09/28/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12925 11=S12924

GC/MS VOLATILE ORGANICS

Batch #: 155349

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214922-3	B	<2				11	RRe 1x OD	TEW 9-26-09
2	↓ -4	↓	↓				↓	↓ 1x ↓	↓
3	214923-6	C	<2	LV		14		↓ 2x ↓	
4	214922-5	A	↓					1x	
5	↓ -7	↓	↓					↓	
6	-8								
7	-9								
8	↓ ~~-10~~							↓	
9	214924-1		↓	LV				1x TB	
10	↓ -2	↓						↓	
11	-3								
12	-4								
13	-5								
14	-6								
15	-7								
16	-8		↓					↓ MSS	
17	-9	↓	<2			15		2.5x	
18	↓ -10	↓	↓					1x	
19	215054-3	C	7				↓	1x	↓
20	~~215113-2~~	—						~~100x~~ FOAM put off	
21	MS/MSD	B,C,D	<2				11		9-28-09 TEW
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Laboratory Job Number 214924

ANALYTICAL REPORT

Semivolatile Organics by GC/MS SIM

Matrix: Water

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	09/15/09
Units:	ug/L	Received:	09/16/09
Diln Fac:	1.000	Prepared:	09/22/09
Batch#:	155185		

Field ID: ASE-60A-9C1 Lab ID: 214924-002
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.96	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	66	43-120	
2-Fluorobiphenyl	58	42-120	

Field ID: ASE-73A-9C1 Lab ID: 214924-003
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	2.1	0.95	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	63	43-120	
2-Fluorobiphenyl	58	42-120	

Field ID: ASE-85A-9C1 Lab ID: 214924-004
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	2.8	0.94	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	61	43-120	
2-Fluorobiphenyl	54	42-120	

Field ID: BC-17-9C1 Lab ID: 214924-005
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.95	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	49	43-120	
2-Fluorobiphenyl	45	42-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	09/15/09
Units:	ug/L	Received:	09/16/09
Diln Fac:	1.000	Prepared:	09/22/09
Batch#:	155185		

Field ID: ASE-70A-9C1 Lab ID: 214924-006
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.94	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	48	43-120	
2-Fluorobiphenyl	45	42-120	

Field ID: PL-520-9C1 Lab ID: 214924-007
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.95	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	56	43-120	
2-Fluorobiphenyl	53	42-120	

Field ID: ASE-76B-9C1 Lab ID: 214924-009
Type: SAMPLE Analyzed: 09/24/09

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.94	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	47	43-120	
2-Fluorobiphenyl	45	42-120	

Type: BLANK Analyzed: 09/23/09
Lab ID: QC513149

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	1.0	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	67	43-120	
2-Fluorobiphenyl	66	42-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513150	Batch#:	155185
Matrix:	Water	Prepared:	09/22/09
Units:	ug/L	Analyzed:	09/25/09

Analyte	Spiked	Result		%REC	Limits	ADEQ Flags
1,4-Dioxane	3.000	2.549	b	85	59-120	V3

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	97	43-120	
2-Fluorobiphenyl	71	42-120	

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	155185
MSS Lab ID:	215044-005	Sampled:	09/16/09
Matrix:	Water	Received:	09/17/09
Units:	ug/L	Prepared:	09/22/09
Diln Fac:	1.000	Analyzed:	09/25/09

Type: MS Lab ID: QC513151

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,4-Dioxane	<0.1887	2.857	2.647 b	93	59-120	V3

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	89	43-120	
2-Fluorobiphenyl	70	42-120	

Type: MSD Lab ID: QC513152

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,4-Dioxane	2.913	2.250 b	77	59-120	18	30	V3

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	85	43-120	
2-Fluorobiphenyl	75	42-120	

b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS DFTPP TUNE FOR 214924 MSSIM Water
EPA 8270C

Inst : MSBNA02 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 519366552001 File : uib01 Time : 11-SEP-2009 13:12

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	51692	42.20	
68	< 2% of mass 69	0	0.00	
69		60389	100.00	
70	< 2% of mass 69	319	0.53	
127	40% - 60% of mass 198	61093	49.87	
197	< 1% of mass 198	0	0.00	
198		122504	100.00	
199	5% - 9% of mass 198	8327	6.80	
275	10% - 30% of mass 198	17782	14.52	
365	> 1% of mass 198	1458	1.19	
441	Present, < mass 443	9353	72.41	
442	> 40% and < 100% of mass 198	65226	53.24	
443	17% - 23% of mass 442	12917	19.80	

Analyst: LLH Date: 09/14/09 Reviewer: LW Date: 09/14/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214924 MSSIM Water
EPA 8270C

Inst : MSBNA02 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 519386632001 File : uip01 Time : 25-SEP-2009 11:52

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	110412	55.21	
68	< 2% of mass 69	0	0.00	
69		124692	100.00	
70	< 2% of mass 69	489	0.39	
127	40% - 60% of mass 198	112473	56.24	
197	< 1% of mass 198	0	0.00	
198		199978	100.00	
199	5% - 9% of mass 198	13850	6.93	
275	10% - 30% of mass 198	28184	14.09	
365	> 1% of mass 198	2248	1.12	
441	Present, < mass 443	16378	74.70	
442	> 40% and < 100% of mass 198	111528	55.77	
443	17% - 23% of mass 442	21924	19.66	

Analyst: LLH Date: 09/25/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214924 MSSIM Water
EPA 8270C

Inst : MSBNA04 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 539304687006 File : wgu06 Time : 30-JUL-2009 18:41

Standards: S12054

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	73066	53.71	
68	< 2% of mass 69	0	0.00	
69		80410	100.00	
70	< 2% of mass 69	173	0.22	
127	40% - 60% of mass 198	67642	49.73	
197	< 1% of mass 198	0	0.00	
198		136029	100.00	
199	5% - 9% of mass 198	8747	6.43	
275	10% - 30% of mass 198	28318	20.82	
365	> 1% of mass 198	3100	2.28	
441	Present, < mass 443	11106	81.60	
442	> 40% and < 100% of mass 198	71218	52.36	
443	17% - 23% of mass 442	13611	19.11	

Analyst: TDL Date: 07/31/09 Reviewer: LW Date: 08/03/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214924 MSSIM Water
EPA 8270C

Inst : MSBNA04 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 539383675001 File : win01 Time : 23-SEP-2009 10:35

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	43849	59.43	
68	< 2% of mass 69	0	0.00	
69		43626	100.00	
70	< 2% of mass 69	221	0.51	
127	40% - 60% of mass 198	38341	51.97	
197	< 1% of mass 198	487	0.66	
198		73778	100.00	
199	5% - 9% of mass 198	6289	8.52	
275	10% - 30% of mass 198	16272	22.06	
365	> 1% of mass 198	2246	3.04	
441	Present, < mass 443	4502	50.65	
442	> 40% and < 100% of mass 198	44872	60.82	
443	17% - 23% of mass 442	8889	19.81	

Analyst: LLH Date: 09/23/09 Reviewer: LW Date: 09/23/09

CURTIS & TOMPKINS DFTPP TUNE FOR 214924 MSSIM Water
EPA 8270C

Inst : MSBNA04 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 539385301001 File : wio01 Time : 24-SEP-2009 13:41

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	27813	57.67	
68	< 2% of mass 69	0	0.00	
69		27818	100.00	
70	< 2% of mass 69	0	0.00	
127	40% - 60% of mass 198	24469	50.74	
197	< 1% of mass 198	267	0.55	
198		48226	100.00	
199	5% - 9% of mass 198	3377	7.00	
275	10% - 30% of mass 198	11178	23.18	
365	> 1% of mass 198	1549	3.21	
441	Present, < mass 443	5012	82.50	
442	> 40% and < 100% of mass 198	34776	72.11	
443	17% - 23% of mass 442	6075	17.47	

Analyst: TDL Date: 09/24/09 Reviewer: LLH Date: 09/25/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 MSSIM Water: EPA 8270C-SIM

Inst : MSBNA02
Calnum : 519366552001
Units : ug/mL

Name : 2PAHSIM
Date : 11-SEP-2009 13:33
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	uib02	519366552002	PAHDIOX #1	11-SEP-2009 13:33	S12862
L2	uib03	519366552003	PAHDIOX #2	11-SEP-2009 14:06	S12863
L3	uib04	519366552004	PAHDIOX #3	11-SEP-2009 14:40	S12864
L4	uib05	519366552005	PAHDIOX #4	11-SEP-2009 15:14	S12865
L5	uib06	519366552006	PAHDIOX #5	11-SEP-2009 15:49	S12866
L6	uib07	519366552007	PAHDIOX #6	11-SEP-2009 16:22	S12867
L7	uib08	519366552008	PAHDIOX #7	11-SEP-2009 16:56	S12868

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
1,4-Dioxane	0.5297m	0.4962m	0.6004m	0.5565m	0.5588m	0.5143m	0.4897m	AVRG		1.86883		0.5351	7	15	0.05	0.99	
Nitrobenzene-d5	0.2068	0.2325	0.2091	0.2782	0.2725	0.2593	0.2707	AVRG		4.04851		0.2470	12	15	0.05	0.99	
2-Fluorobiphenyl	1.2615	1.1081	1.3409	1.2859	1.2604	1.1196	1.3433	AVRG		0.80278		1.2457	8	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
1,4-Dioxane	0.500	-1	1.000	-7	2.500	12	5.000	4	10.00	4	25.00	-4	50.00	-8
Nitrobenzene-d5	0.100	-16	0.200	-6	0.500	-15	1.000	13	2.000	10	5.000	5	10.00	10
2-Fluorobiphenyl	0.100	1	0.200	-11	0.500	8	1.000	3	2.000	1	5.000	-10	10.00	8

LLH 09/14/09 : All manual integrations were done to correct automatically drawn baseline.

Analyst: LLH Date: 09/14/09 Reviewer: LW Date: 09/14/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA02 Name : 2PAHSIM
Calnum : 519366552001 Cal Date : 11-SEP-2009

ICV 519366552009 (uib09 11-SEP-2009) stds: S12219

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,4-Dioxane	10.00	11.11	ug/mL	11	20	m

m=manual integration

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 MSSIM Water: EPA 8270C-SIM

Inst : MSBNA04
Calnum : 539304687003
Units : ug/mL

Name : 4PAHSIM
Date : 30-JUL-2009 19:07
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	wgu07	539304687007	4PAHSIM	30-JUL-2009 19:07	S11712
L2	wgu08	539304687008	4PAHSIM	30-JUL-2009 19:39	S11713
L3	wgu09	539304687009	4PAHSIM	30-JUL-2009 20:11	S11714
L4	wgu10	539304687010	4PAHSIM	30-JUL-2009 20:43	S11715
L5	wgu11	539304687011	4PAHSIM	30-JUL-2009 21:15	S11716
L6	wgu12	539304687012	4PAHSIM	30-JUL-2009 21:46	S11717

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
1,4-Dioxane	0.2943m	0.3144m	0.3289m	0.3414m	0.3339m	0.3435m	AVRG		3.06689		0.3261	6	15	0.05	0.99	
Nitrobenzene-d5	0.3451	0.3496m	0.3521m	0.3566	0.3696m	0.3560	AVRG		2.81827		0.3548	2	15	0.05	0.99	
2-Fluorobiphenyl	1.3252	1.3723m	1.3746m	1.3712m	1.4079	1.4330m	AVRG		0.72427		1.3807	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
1,4-Dioxane	0.500	-10	1.000	-4	2.500	1	5.000	5	10.00	2	25.00	5
Nitrobenzene-d5	0.100	-3	0.200	-1	0.500	-1	1.000	0	2.000	4	5.000	0
2-Fluorobiphenyl	0.100	-4	0.200	-1	0.500	0	1.000	-1	2.000	2	5.000	4

TDL 08/05/09 : Manual integrations due to peak tailing and raised baselines.

Analyst: TDL Date: 08/03/09 Reviewer: LW Date: 08/06/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA04 Name : 4PAHSIM
Calnum : 539304687003 Cal Date : 30-JUL-2009

ICV 539304687014 (wgu14 30-JUL-2009) stds: S12219

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,4-Dioxane	10.00	11.18	ug/mL	12	20	m

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA02 Run Name : PAHDIOX IDF : 1.0
Seqnum : 519386632002.1 File : uip02 Time : 25-SEP-2009 12:12
Cal : 519366552001 Caldate : 11-SEP-2009
Standards: S12865

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,4-Dioxane	0.5351	0.6491	5.000	6.066	ug/mL	**21**	20	0.0500	c+ m ***
Nitrobenzene-d5	0.2470	0.3587	1.000	1.452	ug/mL	**45**	20	0.0500	c+
2-Fluorobiphenyl	1.2457	1.2145	1.000	0.9750	ug/mL	-2	20	0.0500	m

TDL 09/25/09 : Corrected automatically drawn baseline . [general version]

LLH 09/25/09 : corrected baseline [general version]

Analyst: LLH Date: 09/25/09 Reviewer: LW Date: 09/29/09

+=high bias c=CCV m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA04 Run Name : PAHDIOX IDF : 1.0
Seqnum : 539383675002.2 File : win02 Time : 23-SEP-2009 10:54
Cal : 539304687003 Caldate : 30-JUL-2009
Standards: S12865

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,4-Dioxane	0.3261	0.2927	5.000	4.488	ug/mL	-10	20	0.0500	m
Nitrobenzene-d5	0.3548	0.4158	1.000	1.172	ug/mL	17	20	0.0500	
2-Fluorobiphenyl	1.3807	1.4252	1.000	1.032	ug/mL	3	20	0.0500	

LLH 09/23/09 : Corrected automatically drawn baseline . [general version]

LLH 09/23/09 : by SHD [general version]

Analyst: LLH Date: 09/25/09 Reviewer: LW Date: 09/29/09

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA04 Run Name : PAHDIOX IDF : 1.0
Seqnum : 539385301002.1 File : wio02 Time : 24-SEP-2009 14:01
Cal : 539304687003 Caldate : 30-JUL-2009
Standards: S12864

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,4-Dioxane	0.3261	0.2947	2.500	2.260	ug/mL	-10	20	0.0500	m
Nitrobenzene-d5	0.3548	0.3637	0.5000	0.5125	ug/mL	3	20	0.0500	m
2-Fluorobiphenyl	1.3807	1.3453	0.5000	0.4872	ug/mL	-3	20	0.0500	

TDL 09/24/09 : Corrected automatically drawn baseline . [general version]

Analyst: LLH Date: 09/25/09 Reviewer: LW Date: 09/29/09

m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 519386632

Date : 09/25/09
Sequence : MSBNA02 uip

Reference : uip02
Analyzed : 09/25/09 12:12

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS STD	51699	6.89	182433	8.41	91993	10.63	113581	12.54	89162	15.98	70201	17.82
		LOWER LIMIT	25850	6.39	91217	7.91	45997	10.13	56791	12.04	44581	15.48	35101	17.32
		UPPER LIMIT	103398	7.39	364866	8.91	183986	11.13	227162	13.04	178324	16.48	140402	18.32
002	CCV	PAHDIOX	51699	6.89	182433	8.41	91993	10.63	113581	12.54	89162	15.98	70201	17.82
003	LCS	QC513150	53765	6.89	169644	8.41	85947	10.63	117859	12.54	98610	15.98	75540	17.82
004	MS	QC513151	53944	6.89	204956	8.41	90659	10.63	121018	12.54	97763	15.98	88050	17.82
005	MSD	QC513152	52909	6.89	192339	8.41	91403	10.63	120411	12.54	95061	15.98	80601	17.82
006	SAMPLE	215044-011	50083	6.89	193817	8.41	85528	10.63	115142	12.54	96355	15.98	76466	17.82
007	SAMPLE	215058-004	56048	6.90	203208	8.41	108928	10.63	124826	12.54	110107	15.98	95334	17.82
008	SAMPLE	215058-005	60801	6.90	201358	8.41	90826	10.63	126705	12.54	97245	15.98	88123	17.82
009	SAMPLE	215058-008	60848	6.89	216030	8.41	100232	10.63	123809	12.54	95893	15.98	87542	17.82
010	SAMPLE	215075-001	54178	6.89	181934	8.41	85230	10.63	111011	12.54	89467	15.98	75446	17.82
011	SAMPLE	215138-001	61150	6.89	198750	8.41	102966	10.63	116670	12.54	100181	15.98	86993	17.82
012	SAMPLE	215138-011	65341	6.89	220255	8.41	109243	10.63	127743	12.55	102926	15.99	89285	17.83
013	SAMPLE	215138-012	65411	6.90	212226	8.41	104706	10.63	126237	12.54	112513	15.99	98977	17.83
014	SAMPLE	215104-004	63028	6.89	173104	8.41	112136	10.64	109571	12.56	108537	16.01	91841	17.84
015	SAMPLE	215104-002	56761	6.91	182147	8.45	29734 *	10.69	132200	12.57	106840	16.00	6362 *	17.84
016	SAMPLE	215104-003	56480	6.91	73451 *	8.39	98036	10.57	138981	12.57	113298	16.00	1781 *	17.76
017	SAMPLE	215022-007	53475	6.90	173828	8.41	91661	10.63	112731	12.55	95032	15.99	74166	17.83

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 539383675

Date : 09/23/09
Sequence : MSBNA04 win

Reference : win02
Analyzed : 09/23/09 10:54

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS STD	15778	6.98	54064	8.49	34300	10.69	55835	12.59	65997	16.00	59440	17.81
		LOWER LIMIT	7889	6.48	27032	7.99	17150	10.19	27918	12.09	32999	15.50	29720	17.31
		UPPER LIMIT	31556	7.48	108128	8.99	68600	11.19	111670	13.09	131994	16.50	118880	18.31
002	CCV	PAHDIOX	15778	6.98	54064	8.49	34300	10.69	55835	12.59	65997	16.00	59440	17.81
003	BLANK	QC513183	16953	6.98	60156	8.49	37516	10.68	60724	12.59	69142	16.00	60844	17.81
004	LCS	QC513184	18165	6.98	62258	8.49	40256	10.68	66841	12.58	78023	16.00	71613	17.81
005	SAMPLE	214791-022	18098	6.98	63926	8.49	42838	10.68	71272	12.58	81013	16.00	76433	17.81
006	MSS	215102-013	18734	6.98	66441	8.49	43818	10.69	71224	12.59	77910	16.00	74221	17.81
007	MS	QC513187	20955	6.98	74079	8.49	47711	10.69	79187	12.59	90338	16.00	83891	17.81
008	MSD	QC513188	19479	6.98	71052	8.49	43993	10.69	71624	12.59	80329	16.00	73589	17.81
009	MSS	214791-001	22700	6.98	81347	8.49	50492	10.69	78894	12.59	84889	16.00	75345	17.82
010	MS	QC513185	21062	6.98	74176	8.49	46599	10.69	73464	12.59	77272	16.00	67099	17.82
011	MSD	QC513186	22165	6.98	79498	8.49	47649	10.69	77186	12.59	81939	16.00	68932	17.82
012	SAMPLE	214791-002	18620	6.98	65977	8.49	39540	10.69	64040	12.59	67745	16.00	55490	17.82
013	SAMPLE	214791-003	18329	6.99	63451	8.49	38756	10.69	58969	12.59	62313	16.00	48563	17.81
014	SAMPLE	214791-004	17849	6.99	62608	8.49	38139	10.69	60323	12.59	62568	16.01	46213	17.82
015	SAMPLE	214791-005	20010	6.99	69282	8.49	42822	10.69	66247	12.59	65986	16.00	49924	17.81
016	SAMPLE	214791-006	17975	6.99	61848	8.49	38421	10.69	60208	12.59	63866	16.00	43551	17.82
017	BLANK	QC513149	20959	7.00	70879	8.51	44598	10.70	69906	12.60	73649	16.01	53892	17.82
018	LCS	QC513150	19709	6.99	69566	8.49	43869	10.69	67006	12.59	69026	16.00	49749	17.81
019	MSS	215044-005	18061	6.99	62913	8.49	38650	10.69	62706	12.59	62512	16.00	47163	17.81
020	MS	QC513151	17518	6.99	61986	8.49	38970	10.69	59840	12.59	61772	16.00	45553	17.81
021	MSD	QC513152	21250	6.99	76652	8.49	45473	10.69	72578	12.59	77694	16.00	57736	17.81

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 539385301

Date : 09/24/09
Sequence : MSBNA04 wio

Reference : wio02
Analyzed : 09/24/09 14:01

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS STD	17606	6.99	64007	8.50	40837	10.69	65904	12.59	58412	16.00	48373	17.81
		LOWER LIMIT	8803	6.49	32004	8.00	20419	10.19	32952	12.09	29206	15.50	24187	17.31
		UPPER LIMIT	35212	7.49	128014	9.00	81674	11.19	131808	13.09	116824	16.50	96746	18.31
002	CCV	PAHDIOX	17606	6.99	64007	8.50	40837	10.69	65904	12.59	58412	16.00	48373	17.81
003	BLANK	QC513149	21448	7.00	73854	8.51	47648	10.70	74275	12.60	70320	16.01	63527	17.81
004	LCS	QC513150	20215	6.99	70671	8.50	44555	10.69	67721	12.59	61477	16.00	53203	17.81
005	MSS	215044-005	20708	6.99	71583	8.50	44134	10.69	68241	12.59	62313	16.01	54908	17.81
006	MS	QC513151	24702	6.99	86102	8.50	54338	10.69	82433	12.59	78522	16.01	70403	17.81
007	MSD	QC513152	26044	6.99	91568	8.50	56899	10.69	89089	12.59	84024	16.01	73244	17.81
008	SAMPLE	214924-002	23816	6.99	84325	8.50	53022	10.70	80383	12.60	68020	16.00	60406	17.81
009	SAMPLE	214924-003	22495	6.99	77251	8.50	49001	10.69	71565	12.59	60925	16.00	54910	17.81
010	SAMPLE	214924-004	24587	6.99	85796	8.50	54169	10.69	79184	12.59	67804	16.01	59388	17.81
011	SAMPLE	214924-005	24369	6.99	85560	8.50	52361	10.69	79387	12.60	69659	16.01	60575	17.81
012	SAMPLE	214924-006	24537	6.99	87150	8.50	54576	10.69	80882	12.60	66248	16.01	60846	17.81
013	SAMPLE	214924-007	23329	6.99	83444	8.50	51815	10.69	77375	12.59	66302	16.00	58736	17.81
014	SAMPLE	214924-009	25481	6.99	89816	8.50	54612	10.70	81448	12.59	69308	16.01	60311	17.81
015	SAMPLE	214959-008	24998	6.99	89008	8.50	55194	10.69	79946	12.60	70899	16.01	61334	17.82
016	SAMPLE	215039-001	24812	6.99	86250	8.50	53223	10.70	79107	12.59	68264	16.00	62186	17.81
017	SAMPLE	215039-001	21909	6.99	78235	8.50	48355	10.69	69129	12.60	60648	16.00	53248	17.81
018	SAMPLE	215039-003	24945	6.99	88175	8.50	54365	10.69	79376	12.59	69161	16.00	62799	17.81
019	SAMPLE	215039-004	25367	6.99	89904	8.50	54929	10.69	82133	12.59	71900	16.00	62579	17.81
020	SAMPLE	215039-005	26765	6.99	93897	8.50	58148	10.69	85440	12.59	77013	16.00	66929	17.81
021	SAMPLE	215039-006	21965	6.99	79328	8.50	48247	10.70	69028	12.60	61474	16.00	53972	17.81
022	SAMPLE	215044-011	23631	6.99	82877	8.50	50269	10.69	77097	12.59	70020	16.00	63214	17.81
023	SAMPLE	215044-012	23907	6.99	84929	8.50	54537	10.69	81366	12.60	66642	16.01	57974	17.81
024	SAMPLE	215058-004	27392	6.99	98764	8.50	60181	10.70	91355	12.60	83365	16.01	79391	17.81
025	SAMPLE	215058-005	25112	6.99	88396	8.50	56545	10.69	82237	12.60	73914	16.00	67072	17.81
026	SAMPLE	215058-008	25385	6.99	87889	8.50	54017	10.69	82816	12.60	77269	16.01	71519	17.81
027	SAMPLE	215075-001	26940	6.99	99445	8.51	75371	10.70	91750	12.60	93587	16.01	79854	17.81

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 519366552

Instrument : MSBNA02 Begun : 09/11/09 13:12
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	uib01	TUN	DFTPP/PEM 50UG/ML			09/11/09 13:12	1.0	1	
002	uib02	ICAL	PAHDIOX #1			09/11/09 13:33	1.0	2	
003	uib03	ICAL	PAHDIOX #2			09/11/09 14:06	1.0	3	
004	uib04	ICAL	PAHDIOX #3			09/11/09 14:40	1.0	4	
005	uib05	ICAL	PAHDIOX #4			09/11/09 15:14	1.0	5	
006	uib06	ICAL	PAHDIOX #5			09/11/09 15:49	1.0	6	
007	uib07	ICAL	PAHDIOX #6			09/11/09 16:22	1.0	7	
008	uib08	ICAL	PAHDIOX #7			09/11/09 16:56	1.0	8	
009	uib09	ICV	SIMICV			09/11/09 17:32	1.0	9	

LLH 09/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 009.

Analyst: LLH Date: 09/14/09 Reviewer: LW Date: 09/14/09

Standards used: 1=S12602 2=S12862 3=S12863 4=S12864 5=S12865 6=S12866 7=S12867 8=S12868 9=S12219

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 519386632

Instrument : MSBNA02 Begun : 09/25/09 11:52
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	uip01	TUN	DFTPP/PEM 50UG/ML			09/25/09 11:52	1.0	1	
002	uip02	CCV	PAHDIOX			09/25/09 12:12	1.0	2	
003	uip03	LCS	QC513150	Water	155185	09/25/09 12:56	1.0	3	
004	uip04	MS	QC513151	Water	155185	09/25/09 13:30	1.0	3	
005	uip05	MSD	QC513152	Water	155185	09/25/09 14:05	1.0	3	
006	uip06	SAMPLE	215044-011	Water	155185	09/25/09 14:40	1.0	3	
007	uip07	SAMPLE	215058-004	Water	155185	09/25/09 15:16	1.0	3	
008	uip08	SAMPLE	215058-005	Water	155185	09/25/09 15:51	1.0	3	
009	uip09	SAMPLE	215058-008	Water	155185	09/25/09 16:25	1.0	3	
010	uip10	SAMPLE	215075-001	Water	155185	09/25/09 17:00	40.0	3	
011	uip11	SAMPLE	215138-001	Water	155279	09/25/09 17:33	1.0	3	
012	uip12	SAMPLE	215138-011	Water	155279	09/25/09 18:07	1.0	3	
013	uip13	SAMPLE	215138-012	Water	155279	09/25/09 18:40	1.0	3	
014	uip14	SAMPLE	215104-004	Water	155279	09/25/09 19:14	1.0	3	
015	uip15	SAMPLE	215104-002	Water	155279	09/25/09 19:48	1.0	3	3:MTNPH1=43
016	uip16	SAMPLE	215104-003	Water	155279	09/25/09 20:24	1.0	3	2:MTNPH1=99
017	uip17	SAMPLE	215022-007	Water	155279	09/25/09 21:00	4.0	3	

LLH 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 010.

LLH 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 017.

Standards used: 1=S12602 2=S12865 3=S12761

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 539304687

Instrument : MSBNA04 Begun : 07/30/09 14:07
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	wgu01	TUN	DFTPP/PEM 50UG/ML			07/30/09 14:07	1.0	1	
002	wgu02	TUN	DFTPP/PEM 50UG/ML			07/30/09 15:25	1.0	1	
003	wgu03	TUN	DFTPP/PEM 50UG/ML			07/30/09 16:20	1.0	1	
004	wgu04	TUN	DFTPP/PEM 50UG/ML			07/30/09 17:06	1.0	1	
005	wgu05	CCV	PAHDIOX			07/30/09 18:05	1.0	2	
006	wgu06	TUN	DFTPP/PEM 50UG/ML			07/30/09 18:41	1.0	1	
007	wgu07	ICAL	4PAHSIM			07/30/09 19:07	1.0	3	
008	wgu08	ICAL	4PAHSIM			07/30/09 19:39	1.0	4	
009	wgu09	ICAL	4PAHSIM			07/30/09 20:11	1.0	5	
010	wgu10	ICAL	4PAHSIM			07/30/09 20:43	1.0	6	
011	wgu11	ICAL	4PAHSIM			07/30/09 21:15	1.0	7	
012	wgu12	ICAL	4PAHSIM			07/30/09 21:46	1.0	8	
013	wgu13	ICAL	4PAHSIM			07/30/09 22:19	1.0	9	
014	wgu14	ICV	4PAHSIM ICV			07/30/09 22:53	1.0	10	

LLH 08/03/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 014.

Analyst: TDL Date: 07/31/09 Reviewer: LW Date: 08/05/09

Standards used: 1=S12054 2=S12147 3=S11712 4=S11713 5=S11714 6=S11715 7=S11716 8=S11717 9=S11718 10=S12219

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 539383675

Instrument : MSBNA04 Begun : 09/23/09 10:35
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	win01	TUN	DFTPP/PEM 50UG/ML			09/23/09 10:35	1.0	1	
002	win02	CCV	PAHDIOX			09/23/09 10:54	1.0	2	
003	win03	BLANK	QC513183	Soil	155192	09/23/09 11:26	1.0	3	
004	win04	LCS	QC513184	Soil	155192	09/23/09 11:58	1.0	3	
005	win05	SAMPLE	214791-022	Soil	155192	09/23/09 12:30	1.0	3	
006	win06	MSS	215102-013	Soil	155192	09/23/09 13:03	1.0	3	
007	win07	MS	QC513187	Soil	155192	09/23/09 13:35	1.0	3	
008	win08	MSD	QC513188	Soil	155192	09/23/09 14:06	1.0	3	
009	win09	MSS	214791-001	Soil	155192	09/23/09 14:38	1.0	3	
010	win10	MS	QC513185	Soil	155192	09/23/09 15:09	1.0	3	
011	win11	MSD	QC513186	Soil	155192	09/23/09 15:41	1.0	3	
012	win12	SAMPLE	214791-002	Soil	155192	09/23/09 16:13	3.0	3	
013	win13	SAMPLE	214791-003	Soil	155192	09/23/09 16:45	10.0	3	
014	win14	SAMPLE	214791-004	Soil	155192	09/23/09 17:17	3.0	3	
015	win15	SAMPLE	214791-005	Soil	155192	09/23/09 17:48	1.0	3	
016	win16	SAMPLE	214791-006	Soil	155192	09/23/09 18:20	2.0	3	
017	win17	BLANK	QC513149	Water	155185	09/23/09 19:37	1.0	3	
018	win18	LCS	QC513150	Water	155185	09/23/09 20:08	1.0	3	
019	win19	MSS	215044-005	Water	155185	09/23/09 20:40	1.0	3	
020	win20	MS	QC513151	Water	155185	09/23/09 21:12	1.0	3	
021	win21	MSD	QC513152	Water	155185	09/23/09 21:45	1.0	3	

LLH 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 008.

TDL 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Standards used: 1=S12602 2=S12865 3=S12761

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 539385301

Instrument : MSBNA04 Begun : 09/24/09 13:41
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	wio01	TUN	DFTPP/PEM 50UG/ML			09/24/09 13:41	1.0	1	
002	wio02	CCV	PAHDIOX			09/24/09 14:01	1.0	2	
003	wio03	BLANK	QC513149	Water	155185	09/24/09 14:40	1.0	3	
004	wio04	LCS	QC513150	Water	155185	09/24/09 15:13	1.0	3	
005	wio05	MSS	215044-005	Water	155185	09/24/09 15:45	1.0	3	
006	wio06	MS	QC513151	Water	155185	09/24/09 16:18	1.0	3	
007	wio07	MSD	QC513152	Water	155185	09/24/09 16:50	1.0	3	
008	wio08	SAMPLE	214924-002	Water	155185	09/24/09 17:23	1.0	3	
009	wio09	SAMPLE	214924-003	Water	155185	09/24/09 17:55	1.0	3	
010	wio10	SAMPLE	214924-004	Water	155185	09/24/09 18:28	1.0	3	
011	wio11	SAMPLE	214924-005	Water	155185	09/24/09 19:01	1.0	3	
012	wio12	SAMPLE	214924-006	Water	155185	09/24/09 19:33	1.0	3	
013	wio13	SAMPLE	214924-007	Water	155185	09/24/09 20:06	1.0	3	
014	wio14	SAMPLE	214924-009	Water	155185	09/24/09 20:38	1.0	3	
015	wio15	SAMPLE	214959-008	Water	155185	09/24/09 21:10	1.0	3	
016	wio16	SAMPLE	215039-001	Water	155185	09/24/09 21:42	1.0	3	
017	wio17	SAMPLE	215039-001	Water	155185	09/24/09 22:16	1.0	3	
018	wio18	SAMPLE	215039-003	Water	155185	09/24/09 22:49	1.0	3	
019	wio19	SAMPLE	215039-004	Water	155185	09/24/09 23:21	1.0	3	
020	wio20	SAMPLE	215039-005	Water	155185	09/24/09 23:54	1.0	3	
021	wio21	SAMPLE	215039-006	Water	155185	09/25/09 00:28	1.0	3	
022	wio22	SAMPLE	215044-011	Water	155185	09/25/09 01:00	1.0	3	
023	wio23	SAMPLE	215044-012	Water	155185	09/25/09 01:33	1.0	3	
024	wio24	SAMPLE	215058-004	Water	155185	09/25/09 02:06	1.0	3	
025	wio25	SAMPLE	215058-005	Water	155185	09/25/09 02:39	1.0	3	
026	wio26	SAMPLE	215058-008	Water	155185	09/25/09 03:11	1.0	3	
027	wio27	SAMPLE	215075-001	Water	155185	09/25/09 03:44	1.0	3	4:MTNPH2=140

TDL 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 27.

Standards used: 1=S12602 2=S12864 3=S12761

SAMPLE PREPARATION SUMMARY

Batch # : 155185
Started By : DJT
Method : 3520C
Spike #1 ID : S12722

Prep Date : 22-SEP-2009 18:30
Spike #2 ID : S12970

Analysis : 14DIOXANE
Finished By : NAV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214924-002		Water	1040	1	1	0.0009615	7	1				14DIOXANE	
214924-003		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
214924-004		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214924-005		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
214924-006		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214924-007		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
214924-009		Water	1060	1	1	0.0009434	7	1				14DIOXANE	
214959-008		Water	1060	1	1	0.0009434	7	1				8270-SIM	
215039-001		Water	1010	1	1	0.0009901	7	1				14DIOXANE	
215039-003		Water	1010	1	1	0.0009901	7	1				14DIOXANE	
215039-004		Water	1010	1	1	0.0009901	7	1				14DIOXANE	
215039-005		Water	1010	1	1	0.0009901	7	1				14DIOXANE	
215039-006		Water	1000	1	1	0.001	7	1				14DIOXANE	
215044-005		Water	1060	1	1	0.0009434	7	1				8270-SIM	mss
215044-011		Water	1060	1	1	0.0009434	7	1				8270-SIM	
215044-012		Water	1050	1	1	0.0009524	7	1				8270-SIM	
215058-004		Water	1050	1	1	0.0009524	7	1				8270-SIM	
215058-005		Water	1060	1	1	0.0009434	7	1				8270-SIM	
215058-008		Water	1010	1	1	0.0009901	7	1				8270-SIM	
215075-001		Water	1040	1	1	0.0009615	7	1				8270-SIM	
QC513149	BLANK	Water	1000	1	1	0.001		1				8270-SIM	
QC513150	LCS	Water	1000	1	1	0.001		1	1			8270-SIM	
QC513151	MS	Water	1050	1	1	0.0009524	7	1	1			8270-SIM	
QC513152	MSD	Water	1030	1	1	0.0009709	7	1	1			8270-SIM	

Analyst: LLH Date: 09/25/09 Reviewer: LW Date: 09/25/09

BNA (8270 & 625) Water Prep Log **Curtis & Tompkins, Ltd.**

LIMS Analysis: 8270-SIM/1,4 DIOX
LIMS Batch No: 155185
Date Extracted: 9/22/09

Extraction Method:
☒ mod.EPA 3520c cont.L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214924-002	I	1040	7	1.0		
003	H	1050				
004		1060				
005		1050				
006		1060				
007		1050				
009		1060				
214959-008	I					
215039-001	D	1010				
003	A					
004						
005						
006		1000				
215044-005	V	1060				MSS
011	J					
012		1050				
215058-004	E					
005		1060				
008	I	1010				
215075-001	C	1040				
MB QC 513149	NA	1000	NA			
LCS 50						
MS 51	AC	1050	7			
MSD 52	AD	1030				

	Lot# / LIMS # / Time	Date/ Initials
1.0 mL of surrogate solution was added to all samples	S127220	DJT 9/22/09
1.0 mL of matrix spiking solution was added to all spikes	S129708	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS093334	
Cont. L/L extracted with 450mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1830	
Extraction End Time:	1234	DDC 9/23/09
pH of all samples adjusted to pH ≥ 11 with 10 N NaOH	N/A	NAV 9/23/09
Extraction Start Time:		
Extraction End Time:		
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49007919	
Concentrated to final volume at temperature (degrees C)	70	
Relinquished to BNA department	✓	

9/22/09
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

Reviewed by **Date**

Laboratory Job Number 214924

ANALYTICAL REPORT

Metals

Matrix: Water

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-60A-9C1	Sampled:	09/15/09
Lab ID:	214924-002	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	4.9	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	50	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	450	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	51,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	1.8	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	19,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	1.9	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	4,600	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	170,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-73A-9C1	Sampled:	09/15/09
Lab ID:	214924-003	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	6.3	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	71	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	1,100	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	57,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	4.8	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	22,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	1.4	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	2.7	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	5,300	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	1.0	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	240,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	7.1	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-85A-9C1	Sampled:	09/15/09
Lab ID:	214924-004	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	5.9	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	56	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	1,200	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	57,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	8.4	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	250	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	22,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	2.3	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	5,200	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	1.2	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	240,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	BC-17-9C1	Sampled:	09/15/09
Lab ID:	214924-005	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	11	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	38	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	1,400	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	36,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	40	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	820	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	13,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	7.3	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	84	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	4,200	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	1.1	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	250,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-70A-9C1	Sampled:	09/15/09
Lab ID:	214924-006	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	8.6	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	40	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	1,600	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	42,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	2.4	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	16,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	4.0	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	4.3	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	4,500	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	1.3	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	260,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	PL-520-9C1	Sampled:	09/15/09
Lab ID:	214924-007	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	7.9	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	38	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	1,500	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	41,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	2.5	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	67	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	15,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	5.0	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	4.0	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	4,300	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	1.2	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	260,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	214924	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-76B-9C1	Sampled:	09/15/09
Lab ID:	214924-009	Received:	09/16/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Arsenic	5.5	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Barium	95	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Boron	280	100	1.000	155040	09/28/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Calcium	79,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Chromium	1.9	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Iron	910	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Magnesium	28,000	50	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Manganese	7.0	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	154984	09/17/09	METHOD	EPA 7470A	
Nickel	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Potassium	4,300	50	5.000	155040	09/23/09	EPA 200.8	EPA 6020	
Selenium	2.0	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Sodium	210,000	500	50.00	155040	09/23/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155040	09/22/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	154984
Lab ID:	QC512341	Prepared:	09/17/09
Matrix:	Water	Analyzed:	09/17/09
Units:	ug/L		

Result	RL	ADEQ Flags
ND	0.20	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	154984
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/17/09
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC512342	2.500	2.470	99	80-120			
BSD	QC512343	2.500	2.480	99	80-120	0	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	154984
Field ID:	ZZZZZZZZZZ	Sampled:	09/08/09
MSS Lab ID:	214921-001	Received:	09/15/09
Matrix:	Water	Prepared:	09/17/09
Units:	ug/L	Analyzed:	09/17/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC512344	<0.03757	2.500	2.650	106	80-120			
MSD	QC512345		2.500	2.670	107	80-120	1	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	154984
MSS Lab ID:	214921-001	Sampled:	09/08/09
Lab ID:	QC512346	Received:	09/15/09
Matrix:	Water	Analyzed:	09/17/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
ND	0.2000	ND	1.000	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Type:	BLANK	Units:	ug/L
Lab ID:	QC512570	Batch#:	155040
Matrix:	Water	Prepared:	09/17/09

Analyte	Result	RL	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	09/22/09	EPA 6020	
Antimony	ND	1.0	5.000	09/22/09	EPA 6020	
Arsenic	ND	1.0	5.000	09/22/09	EPA 6020	
Barium	ND	1.0	5.000	09/22/09	EPA 6020	
Beryllium	ND	1.0	5.000	09/22/09	EPA 6020	
Boron	ND	100	1.000	09/28/09	EPA 6010B	
Cadmium	ND	1.0	5.000	09/22/09	EPA 6020	
Calcium	ND	50	5.000	09/22/09	EPA 6020	
Chromium	ND	1.0	5.000	09/22/09	EPA 6020	
Iron	ND	50	5.000	09/22/09	EPA 6020	
Lead	ND	1.0	5.000	09/22/09	EPA 6020	
Magnesium	ND	50	5.000	09/22/09	EPA 6020	
Manganese	ND	1.0	5.000	09/22/09	EPA 6020	
Nickel	ND	1.0	5.000	09/22/09	EPA 6020	
Potassium	ND	50	5.000	09/22/09	EPA 6020	
Selenium	ND	1.0	5.000	09/22/09	EPA 6020	
Silver	ND	1.0	5.000	09/22/09	EPA 6020	
Sodium	ND	50	5.000	09/22/09	EPA 6020	
Thallium	ND	1.0	5.000	09/22/09	EPA 6020	
Zinc	ND	5.0	5.000	09/22/09	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Matrix:	Water	Batch#:	155040
Units:	ug/L	Prepared:	09/17/09

Type: BS Lab ID: QC512571

Analyte	Spiked	Result	%REC	Limits	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	9,900	99	78-114	5.000	09/22/09	EPA 6020	
Antimony	100.0	96.50	97	81-108	5.000	09/22/09	EPA 6020	
Arsenic	100.0	98.40	98	88-120	5.000	09/22/09	EPA 6020	
Barium	100.0	95.35	95	90-120	5.000	09/22/09	EPA 6020	
Beryllium	100.0	96.00	96	89-120	5.000	09/22/09	EPA 6020	
Boron	1,000	1,070	107	88-113	1.000	09/28/09	EPA 6010B	
Cadmium	100.0	96.55	97	88-120	5.000	09/22/09	EPA 6020	
Calcium	10,000	10,320	103	89-112	5.000	09/22/09	EPA 6020	
Chromium	100.0	102.4	102	90-120	5.000	09/22/09	EPA 6020	
Iron	10,000	10,370	104	89-120	5.000	09/22/09	EPA 6020	
Lead	100.0	104.0	104	89-120	5.000	09/22/09	EPA 6020	
Magnesium	10,000	9,830	98	77-114	5.000	09/22/09	EPA 6020	
Manganese	100.0	99.05	99	90-120	5.000	09/22/09	EPA 6020	
Nickel	100.0	103.9	104	89-120	5.000	09/22/09	EPA 6020	
Potassium	10,000	8,975	90	87-110	5.000	09/22/09	EPA 6020	
Selenium	100.0	104.1	104	90-120	5.000	09/22/09	EPA 6020	
Silver	100.0	91.65	92	86-120	5.000	09/22/09	EPA 6020	
Sodium	10,000	9,820	98	85-116	5.000	09/22/09	EPA 6020	
Thallium	50.00	47.79	96	82-109	5.000	09/22/09	EPA 6020	
Zinc	100.0	103.0	103	79-110	5.000	09/22/09	EPA 6020	

Type: BSD Lab ID: QC512572

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	10,540	105	78-114	6	7	5.000	09/22/09	EPA 6020	
Antimony	100.0	101.2	101	81-108	5	7	5.000	09/22/09	EPA 6020	
Arsenic	100.0	98.00	98	88-120	0	20	5.000	09/22/09	EPA 6020	
Barium	100.0	100.4	100	90-120	5	20	5.000	09/22/09	EPA 6020	
Beryllium	100.0	101.6	102	89-120	6	20	5.000	09/22/09	EPA 6020	
Boron	1,000	1,063	106	88-113	1	9	1.000	09/28/09	EPA 6010B	
Cadmium	100.0	100.8	101	88-120	4	20	5.000	09/22/09	EPA 6020	
Calcium	10,000	10,880	109	89-112	5	7	5.000	09/22/09	EPA 6020	
Chromium	100.0	102.2	102	90-120	0	20	5.000	09/22/09	EPA 6020	
Iron	10,000	10,420	104	89-120	1	20	5.000	09/22/09	EPA 6020	
Lead	100.0	109.9	110	89-120	6	20	5.000	09/22/09	EPA 6020	
Magnesium	10,000	10,490	105	77-114	6	7	5.000	09/22/09	EPA 6020	
Manganese	100.0	99.05	99	90-120	0	20	5.000	09/22/09	EPA 6020	
Nickel	100.0	104.8	105	89-120	1	20	5.000	09/22/09	EPA 6020	
Potassium	10,000	9,395	94	87-110	5	7	5.000	09/22/09	EPA 6020	
Selenium	100.0	105.9	106	90-120	2	20	5.000	09/22/09	EPA 6020	
Silver	100.0	96.30	96	86-120	5	20	5.000	09/22/09	EPA 6020	
Sodium	10,000	9,795	98	85-116	0	8	5.000	09/22/09	EPA 6020	
Thallium	50.00	50.40	101	82-109	5	7	5.000	09/22/09	EPA 6020	
Zinc	100.0	104.2	104	79-110	1	11	5.000	09/22/09	EPA 6020	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Field ID:	ZZZZZZZZZZ	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Prepared:	09/17/09

Type: MS Lab ID: QC512573

Analyte	MSS Result	Spiked	Result	%REC	Limits	Dln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	13.02	10,000	9,875	99	75-113	5.000	09/22/09	EPA 6020	
Antimony	0.1575	100.0	97.10	97	76-108	5.000	09/22/09	EPA 6020	
Arsenic	2.121	100.0	101.8	100	84-124	5.000	09/22/09	EPA 6020	
Barium	93.15	100.0	188.8	96	85-120	5.000	09/22/09	EPA 6020	
Beryllium	<0.1188	100.0	97.70	98	79-121	5.000	09/22/09	EPA 6020	
Boron	95.36	1,000	1,210	111	77-122	1.000	09/28/09	EPA 6010B	
Cadmium	<0.08328	100.0	96.25	96	82-120	5.000	09/22/09	EPA 6020	
Calcium	31,840	10,000	43,140	113	69-123	5.000	09/22/09	EPA 6020	
Chromium	<0.1476	100.0	103.6	104	73-135	5.000	09/22/09	EPA 6020	
Iron	19.99	10,000	10,530	105	52-155	5.000	09/22/09	EPA 6020	
Lead	0.2325	100.0	105.4	105	89-121	5.000	09/22/09	EPA 6020	
Magnesium	5,220	10,000	15,260	100	66-123	5.000	09/22/09	EPA 6020	
Manganese	1.352	100.0	101.0	100	79-121	5.000	09/22/09	EPA 6020	
Nickel	0.8110	100.0	106.5	106	84-120	5.000	09/22/09	EPA 6020	
Potassium	2,459	10,000	11,860	94	76-117	5.000	09/22/09	EPA 6020	
Selenium	<0.1544	100.0	106.1	106	71-140	5.000	09/22/09	EPA 6020	
Silver	<0.06798	100.0	91.50	92	75-141	5.000	09/22/09	EPA 6020	
Sodium	12,780	10,000	23,840	111	61-128	5.000	09/22/09	EPA 6020	
Thallium	0.05750	50.00	48.10	96	70-109	5.000	09/22/09	EPA 6020	
Zinc	5.960	100.0	108.1	102	61-124	5.000	09/22/09	EPA 6020	

Type: MSD Lab ID: QC512574

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Dln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	9,635	96	75-113	2	15	5.000	09/22/09	EPA 6020	
Antimony	100.0	95.25	95	76-108	2	12	5.000	09/22/09	EPA 6020	
Arsenic	100.0	99.05	97	84-124	3	20	5.000	09/22/09	EPA 6020	
Barium	100.0	185.8	93	85-120	2	20	5.000	09/22/09	EPA 6020	
Beryllium	100.0	95.30	95	79-121	2	20	5.000	09/22/09	EPA 6020	
Boron	1,000	1,208	111	77-122	0	13	1.000	09/28/09	EPA 6010B	
Cadmium	100.0	93.50	94	82-120	3	20	5.000	09/22/09	EPA 6020	
Calcium	10,000	42,520	107	69-123	1	24	5.000	09/22/09	EPA 6020	
Chromium	100.0	100.1	100	73-135	3	20	5.000	09/22/09	EPA 6020	
Iron	10,000	9,925	99	52-155	6	20	5.000	09/22/09	EPA 6020	
Lead	100.0	103.0	103	89-121	2	20	5.000	09/22/09	EPA 6020	
Magnesium	10,000	14,900	97	66-123	2	13	5.000	09/22/09	EPA 6020	
Manganese	100.0	98.90	98	79-121	2	20	5.000	09/22/09	EPA 6020	
Nickel	100.0	102.8	102	84-120	3	20	5.000	09/22/09	EPA 6020	
Potassium	10,000	11,440	90	76-117	4	19	5.000	09/22/09	EPA 6020	
Selenium	100.0	103.4	103	71-140	3	20	5.000	09/22/09	EPA 6020	
Silver	100.0	89.65	90	75-141	2	20	5.000	09/22/09	EPA 6020	
Sodium	10,000	23,040	103	61-128	3	19	5.000	09/22/09	EPA 6020	
Thallium	50.00	46.44	93	70-109	4	13	5.000	09/22/09	EPA 6020	
Zinc	100.0	102.6	97	61-124	5	30	5.000	09/22/09	EPA 6020	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Lab ID:	QC512575	Received:	09/11/09
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	13.02	50.00	ND	250.0	NC	10	25.00	09/22/09	EPA 6020	
Antimony	0.1575	1.000	ND	2.500	NC	10	25.00	09/22/09	EPA 6020	
Arsenic	2.121	1.000	2.088 J	2.500	NC	10	25.00	09/22/09	EPA 6020	E4
Barium	93.15	1.000	91.33	2.500	2	10	25.00	09/22/09	EPA 6020	
Beryllium	ND	1.000	ND	2.500	NC	10	25.00	09/22/09	EPA 6020	
Boron	95.36	100.0	181.2 J	500.0	NC	10	5.000	09/28/09	EPA 6010B	E4
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	09/22/09	EPA 6020	
Calcium	31,840	50.00	32,880	250.0	3	10	25.00	09/22/09	EPA 6020	
Chromium	ND	1.000	ND	2.500	NC	10	25.00	09/22/09	EPA 6020	
Iron	19.99	50.00	39.40 J	250.0	NC	10	25.00	09/22/09	EPA 6020	E4
Lead	0.2325	1.000	0.8725 J	2.500	NC	10	25.00	09/22/09	EPA 6020	E4
Magnesium	5,220	50.00	5,320	250.0	2	10	25.00	09/22/09	EPA 6020	
Manganese	1.352	1.000	1.375 J	2.500	NC	10	25.00	09/22/09	EPA 6020	E4
Nickel	0.8110	1.000	0.5900 J	2.500	NC	10	25.00	09/22/09	EPA 6020	E4
Potassium	2,459	50.00	2,598	250.0	6	10	25.00	09/22/09	EPA 6020	
Selenium	ND	1.000	ND	2.500	NC	10	25.00	09/22/09	EPA 6020	
Silver	ND	1.000	ND	2.500	NC	10	25.00	09/22/09	EPA 6020	
Sodium	12,780	50.00	13,110	250.0	3	10	25.00	09/22/09	EPA 6020	
Thallium	0.05750	1.000	ND	1.250	NC	10	25.00	09/22/09	EPA 6020	
Zinc	5.960	5.000	15.67 J	16.27	NC	10	25.00	09/22/09	EPA 6020	E4

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	155040
MSS Lab ID:	214809-001	Sampled:	09/10/09
Lab ID:	QC512576	Received:	09/11/09
Matrix:	Water		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	13.02	50,000	43,730	87	75-125	5.000	09/22/09	EPA 6020	
Antimony	0.1575	500.0	480.2	96	75-125	5.000	09/22/09	EPA 6020	
Arsenic	2.121	500.0	450.3	90	75-125	5.000	09/22/09	EPA 6020	
Barium	93.15	500.0	496.6	81	75-125	5.000	09/22/09	EPA 6020	
Beryllium	<0.1188	500.0	415.7	83	75-125	5.000	09/22/09	EPA 6020	
Boron	95.36	1,000	1,106	101	75-125	1.000	09/28/09	EPA 6010B	
Cadmium	<0.08328	500.0	423.1	85	75-125	5.000	09/22/09	EPA 6020	
Calcium	31,840	50,000	75,000	86	75-125	5.000	09/22/09	EPA 6020	
Chromium	<0.1476	500.0	449.3	90	75-125	5.000	09/22/09	EPA 6020	
Iron	19.99	50,000	43,150	86	75-125	5.000	09/22/09	EPA 6020	
Lead	0.2325	500.0	468.3	94	75-125	5.000	09/22/09	EPA 6020	
Magnesium	5,220	50,000	47,820	85	75-125	5.000	09/22/09	EPA 6020	
Manganese	1.352	500.0	434.7	87	75-125	5.000	09/22/09	EPA 6020	
Nickel	0.8110	500.0	460.2	92	75-125	5.000	09/22/09	EPA 6020	
Potassium	2,459	50,000	43,630	82	75-125	5.000	09/22/09	EPA 6020	
Selenium	<0.1544	500.0	440.6	88	75-125	5.000	09/22/09	EPA 6020	
Silver	<0.06798	500.0	467.5	93	75-125	5.000	09/22/09	EPA 6020	
Sodium	12,780	50,000	56,150	87	75-125	5.000	09/22/09	EPA 6020	
Thallium	0.05750	250.0	229.2	92	75-125	5.000	09/22/09	EPA 6020	
Zinc	5.960	500.0	443.4	87	75-125	5.000	09/22/09	EPA 6020	

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	155040
MSS Lab ID:	214809-002	Sampled:	09/10/09
Matrix:	Water	Received:	09/11/09
Units:	ug/L	Prepared:	09/17/09
Diln Fac:	5.000	Analyzed:	09/22/09

Type: MS Lab ID: QC512577

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Aluminum	<10.95	10,000	9,760	98	75-113	
Antimony	0.1120	100.0	95.75	96	76-108	
Arsenic	4.982	100.0	103.2	98	84-124	
Barium	108.8	100.0	195.8	87	85-120	
Beryllium	<0.1188	100.0	97.20	97	79-121	
Boron			NA			
Cadmium	<0.08328	100.0	94.85	95	82-120	
Calcium	32,730	10,000	42,260	95	69-123	
Chromium	<0.1476	100.0	102.9	103	73-135	
Iron	1,592	10,000	11,870	103	52-155	
Lead	0.2885	100.0	104.8	105	89-121	
Magnesium	5,210	10,000	14,770	96	66-123	
Manganese	699.5	100.0	800.5	101 NM	79-121	M3
Nickel	0.6705	100.0	105.6	105	84-120	
Potassium	2,481	10,000	11,690	92	76-117	
Selenium	<0.1544	100.0	104.3	104	71-140	
Silver	<0.06798	100.0	90.45	90	75-141	
Sodium	12,520	10,000	22,610	101	61-128	
Thallium	<0.02757	50.00	47.43	95	70-109	
Zinc	11.53	100.0	104.2	93	61-124	

Type: MSD Lab ID: QC512578

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Aluminum	10,000	9,500	95	75-113	3	15	
Antimony	100.0	95.00	95	76-108	1	12	
Arsenic	100.0	100.1	95	84-124	3	20	
Barium	100.0	194.3	86	85-120	1	20	
Beryllium	100.0	96.35	96	79-121	1	20	
Boron		NA					
Cadmium	100.0	92.55	93	82-120	2	20	
Calcium	10,000	42,260	95	69-123	0	24	
Chromium	100.0	101.2	101	73-135	2	20	
Iron	10,000	11,760	102	52-155	1	20	
Lead	100.0	101.9	102	89-121	3	20	
Magnesium	10,000	14,520	93	66-123	2	13	
Manganese	100.0	796.0	97 NM	79-121	1	20	M3
Nickel	100.0	104.0	103	84-120	2	20	
Potassium	10,000	11,380	89	76-117	3	19	
Selenium	100.0	101.9	102	71-140	2	20	
Silver	100.0	88.60	89	75-141	2	20	
Sodium	10,000	22,430	99	61-128	1	19	
Thallium	50.00	46.77	94	70-109	1	13	
Zinc	100.0	101.8	90	61-124	2	30	

NA= Not Analyzed
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

REPORTING SUMMARY FOR 214924 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALK	SBS	ASA	BBE	BCD	CCA	CCR	FEB	PBG	MGN	MGN	HGI	NKI	SEG	AGA	NAL	TLN	ZN
214924-002	MET04	09/17/09 12:10	1.0												+						
214924-002	MET26	09/22/09 06:26	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-002	MET26	09/23/09 04:44	50.0																+		
214924-002	MET26	09/23/09 07:05	5.0														+				
214924-002	MET09	09/28/09 13:37	1.0					+													
214924-003	MET04	09/17/09 12:13	1.0												+						
214924-003	MET26	09/22/09 06:36	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-003	MET26	09/23/09 04:54	50.0																+		
214924-003	MET26	09/23/09 07:16	5.0														+				
214924-003	MET09	09/28/09 13:44	1.0					+													
214924-004	MET04	09/17/09 12:15	1.0												+						
214924-004	MET26	09/22/09 06:47	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-004	MET26	09/23/09 05:04	50.0																+		
214924-004	MET26	09/23/09 07:26	5.0														+				
214924-004	MET09	09/28/09 14:04	1.0					+													
214924-005	MET04	09/17/09 12:18	1.0												+						
214924-005	MET26	09/22/09 06:57	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-005	MET26	09/23/09 05:14	50.0																+		
214924-005	MET26	09/23/09 07:36	5.0														+				
214924-005	MET09	09/28/09 14:11	1.0					+													
214924-006	MET04	09/17/09 12:20	1.0												+						
214924-006	MET26	09/22/09 07:25	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-006	MET26	09/23/09 05:24	50.0																+		
214924-006	MET26	09/23/09 07:46	5.0														+				
214924-006	MET09	09/28/09 14:19	1.0					+													
214924-007	MET04	09/17/09 12:22	1.0												+						
214924-007	MET26	09/22/09 07:35	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-007	MET26	09/23/09 05:34	50.0																+		
214924-007	MET26	09/23/09 07:56	5.0														+				
214924-007	MET09	09/28/09 14:27	1.0					+													
214924-009	MET04	09/17/09 12:24	1.0												+						
214924-009	MET26	09/22/09 07:45	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+
214924-009	MET26	09/23/09 06:15	50.0																+		
214924-009	MET26	09/23/09 08:06	5.0														+				
214924-009	MET09	09/28/09 14:34	1.0					+													
QC512341	MET04	09/17/09 11:36	1.0												+						
QC512342	MET04	09/17/09 11:38	1.0												+						
QC512343	MET04	09/17/09 11:40	1.0												+						
QC512344	MET04	09/17/09 11:46	1.0												+						
QC512345	MET04	09/17/09 11:48	1.0												+						
QC512346	MET04	09/17/09 11:51	5.0												+						

REPORTING SUMMARY FOR 214924 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALK	SBS	ABS	BAE	BE	CD	CA	CR	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	ZN
QC512570	MET26	09/22/09 02:34	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512570	MET06	09/22/09 18:05	5.0															+					
QC512570	MET09	09/28/09 12:29	1.0					+															
QC512571	MET26	09/22/09 02:44	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512571	MET06	09/22/09 18:16	5.0															+					
QC512571	MET09	09/28/09 12:34	1.0					+															
QC512572	MET26	09/22/09 02:54	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512572	MET06	09/22/09 18:26	5.0															+					
QC512572	MET09	09/28/09 12:52	1.0					+															
QC512573	MET26	09/22/09 03:24	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512573	MET06	09/22/09 18:57	5.0															+					
QC512573	MET09	09/28/09 13:03	1.0					+															
QC512574	MET26	09/22/09 03:54	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512574	MET06	09/22/09 19:07	5.0															+					
QC512574	MET09	09/28/09 13:07	1.0					+															
QC512575	MET26	09/22/09 03:14	25.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512575	MET06	09/22/09 18:47	25.0															+					
QC512575	MET09	09/28/09 13:12	5.0					+															
QC512576	MET26	09/22/09 04:04	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512576	MET06	09/22/09 19:18	5.0															+					
QC512576	MET09	09/28/09 13:18	1.0					+															
QC512577	MET26	09/22/09 04:45	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512577	MET06	09/22/09 16:42	5.0															+					
QC512578	MET26	09/22/09 04:55	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC512578	MET06	09/22/09 16:52	5.0															+					

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019380797

Instrument : MET26 Begun : 09/21/09 10:37
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i21k00001	TUN				09/21/09 10:37	1.0	1	
002	09i21k00002	X	RINSE			09/21/09 10:43	1.0	2	
003	09i21k00003	X	CALBLANK			09/21/09 10:54	1.0	2	
004	09i21k00004	X				09/21/09 11:04	1.0	3 2	
005	09i21k00005	ICALBLK	CALBLANK			09/21/09 11:14	1.0	2	
006	09i21k00006	ICAL				09/21/09 11:25	1.0	3 2	
007	09i21k00007	ICAL				09/21/09 11:36	1.0	4 2	
008	09i21k00008	ICAL				09/21/09 11:46	1.0	5 2	
009	09i21k00009	ICAL				09/21/09 11:56	1.0	6 2	
010	09i21k00010	ICAL				09/21/09 12:06	1.0	7 2	
011	09i21k00011	ICAL				09/21/09 12:16	1.0	8 2	
012	09i21k00012	ICV				09/21/09 12:25	1.0	9 2	
013	09i21k00013	ICB				09/21/09 12:36	1.0	2	
014	09i21k00014	ICSA				09/21/09 12:46	1.0	10 2	6:CA=320000
015	09i21k00015	ICSAB				09/21/09 12:56	1.0	11 2	10:CA=320000
016	09i21k00016	X	RINSE			09/21/09 13:06	1.0	2	
017	09i21k00017	X	RINSE			09/21/09 13:19	1.0	2	
018	09i21k00018	BS	QC512532	Soil	155033	09/21/09 13:29	25.0	2	
019	09i21k00019	BSD	QC512533	Soil	155033	09/21/09 13:36	25.0	2	
020	09i21k00020	SAMPLE	214812-008	Soil	154881	09/21/09 13:46	50.0	2	1:MN=340
021	09i21k00021	SAMPLE	214812-009	Soil	154881	09/21/09 13:54	50.0	2	1:MN=320
022	09i21k00022	MSS	214895-001	WET Leachate	155049	09/21/09 14:04	500.0	2	
023	09i21k00023	BLANK	QC512602	TCLP Leachate	155047	09/21/09 14:14	50.0	2	1:NA=29000
024	09i21k00024	MSS	214842-001	WET Leachate	155003	09/21/09 14:24	500.0	2	
025	09i21k00025	CCV				09/21/09 14:34	1.0	12 2	
026	09i21k00026	CCB				09/21/09 14:44	1.0	2	
027	09i21k00027	ICSA				09/21/09 14:54	1.0	10 2	6:CA=320000
028	09i21k00028	ICSAB				09/21/09 15:04	1.0	11 2	9:CA=320000
029	09i21k00029	X	RINSE			09/21/09 15:12	1.0	2	
030	09i21k00030	X	RINSE			09/21/09 15:22	1.0	2	
031	09i21k00031	X	RINSE			09/21/09 15:32	1.0	2	
032	09i21k00032	BLANK	QC512401	WET Leachate	155003	09/21/09 15:43	50.0	2	1:NA=31000
033	09i21k00033	SAMPLE	214900-002	Water	154979	09/21/09 15:53	1000	2	
034	09i21k00034	SAMPLE	214901-008	Water	154979	09/21/09 16:03	1000	2	
035	09i21k00035	SAMPLE	214901-009	Water	154979	09/21/09 16:13	50.0	2	
036	09i21k00036	SAMPLE	214901-010	Water	154979	09/21/09 16:23	5.0	2	1:NA=23000
037	09i21k00037	MSS	214847-001	Soil	155033	09/21/09 16:33	50.0	2	
038	09i21k00038	SER	QC512538	Soil	155033	09/21/09 16:50	250.0	2	
039	09i21k00039	PDS	QC512539	Soil	155033	09/21/09 17:00	50.0	13 14 2	
040	09i21k00040	CCV				09/21/09 17:10	1.0	12 2	
041	09i21k00041	CCB				09/21/09 17:19	1.0	2	
042	09i21k00042	SAMPLE	214901-008	Water	154979	09/21/09 17:30	1000	2	
043	09i21k00043	SAMPLE	214901-009	Water	154979	09/21/09 17:40	50.0	2	
044	09i21k00044	SAMPLE	214901-010	Water	154979	09/21/09 17:50	5.0	2	1:NA=24000
045	09i21k00045	CCV				09/21/09 18:00	1.0	12 2	
046	09i21k00046	CCB				09/21/09 18:10	1.0	2	
047	09i21k00047	SAMPLE	214901-008	Water	154979	09/21/09 18:20	100.0	2	
048	09i21k00048	CCV				09/21/09 18:30	1.0	12 2	
049	09i21k00049	CCB				09/21/09 18:40	1.0	2	
050	09i21k00050	BLANK	QC512730	Filtrate	155083	09/21/09 18:51	5.0	2	
051	09i21k00051	BS	QC512731	Filtrate	155083	09/21/09 19:01	5.0	2	
052	09i21k00052	BSD	QC512732	Filtrate	155083	09/21/09 19:11	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019380797

Instrument : MET26 Begun : 09/21/09 10:37
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i21k00053	MSS	214959-001	Filtrate	155083	09/21/09 19:21	5.0	2	
054	09i21k00054	SER	QC512735	Filtrate	155083	09/21/09 19:31	25.0	2	
055	09i21k00055	MS	QC512733	Filtrate	155083	09/21/09 19:41	5.0	2	
056	09i21k00056	MSD	QC512734	Filtrate	155083	09/21/09 19:51	5.0	2	
057	09i21k00057	PDS	QC512736	Filtrate	155083	09/21/09 20:01	5.0	13 14 2	
058	09i21k00058	SAMPLE	214959-005	Filtrate	155083	09/21/09 20:11	5.0	2	
059	09i21k00059	SAMPLE	214959-007	Filtrate	155083	09/21/09 20:21	5.0	2	
060	09i21k00060	CCV				09/21/09 20:31	1.0	12 2	
061	09i21k00061	CCB				09/21/09 20:41	1.0	2	
062	09i21k00062	TUN				09/21/09 20:52	1.0	1	
063	09i21k00063	X	RINSE			09/21/09 20:59	1.0	2	
064	09i21k00064	SAMPLE	214959-008	Filtrate	155083	09/21/09 21:09	5.0	2	
065	09i21k00065	SAMPLE	214959-009	Filtrate	155083	09/21/09 21:19	5.0	2	1:MN=300
066	09i21k00066	SAMPLE	214959-010	Filtrate	155083	09/21/09 21:29	5.0	2	1:MN=680
067	09i21k00067	SAMPLE	214959-011	Filtrate	155083	09/21/09 21:39	5.0	2	
068	09i21k00068	SAMPLE	214959-013	Filtrate	155083	09/21/09 21:50	5.0	2	
069	09i21k00069	CCV				09/21/09 22:00	1.0	12 2	
070	09i21k00070	CCB				09/21/09 22:10	1.0	2	
071	09i21k00071	BLANK	QC512799	Water	155100	09/21/09 22:20	5.0	2	
072	09i21k00072	BS	QC512800	Water	155100	09/21/09 22:30	5.0	2	
073	09i21k00073	BSD	QC512801	Water	155100	09/21/09 22:40	5.0	2	
074	09i21k00074	MSS	214956-001	Water	155100	09/21/09 22:50	5.0	2	2:NA=38000
075	09i21k00075	MS	QC512802	Water	155100	09/21/09 23:00	5.0	2	
076	09i21k00076	MSD	QC512803	Water	155100	09/21/09 23:10	5.0	2	
077	09i21k00077	SAMPLE	214954-001	Water	155100	09/21/09 23:20	5.0	2	
078	09i21k00078	SAMPLE	214954-002	Water	155100	09/21/09 23:30	5.0	2	
079	09i21k00079	SAMPLE	214954-003	Water	155100	09/21/09 23:40	5.0	2	
080	09i21k00080	SAMPLE	214954-004	Water	155100	09/21/09 23:51	5.0	2	1:NA=31000
081	09i21k00081	CCV				09/22/09 00:01	1.0	12 2	
082	09i21k00082	CCB				09/22/09 00:11	1.0	2	
083	09i21k00083	SAMPLE	214956-002	Water	155100	09/22/09 00:21	5.0	2	4:NA=76000
084	09i21k00084	SAMPLE	214956-003	Water	155100	09/22/09 00:31	5.0	2	2:NA=45000
085	09i21k00085	SAMPLE	214956-004	Water	155100	09/22/09 00:41	5.0	2	2:NA=68000
086	09i21k00086	CCV				09/22/09 00:51	1.0	12 2	
087	09i21k00087	CCB				09/22/09 01:01	1.0	2	
088	09i21k00088	X				09/22/09 01:12	1.0	10 2	7:CA=320000
089	09i21k00089	ICSA				09/22/09 01:22	1.0	10 2	6:CA=320000
090	09i21k00090	ICSAB				09/22/09 01:32	1.0	11 2	11:CA=320000
091	09i21k00091	X	RINSE			09/22/09 01:43	1.0	2	
092	09i21k00092	X	RINSE			09/22/09 01:53	1.0	2	
093	09i21k00093	X				09/22/09 02:03	1.0	11 2	11:CA=320000
094	09i21k00094	X	RINSE			09/22/09 02:13	1.0	2	
095	09i21k00095	X	RINSE			09/22/09 02:23	1.0	2	
096	09i21k00096	BLANK	QC512570	Water	155040	09/22/09 02:34	5.0	2	
097	09i21k00097	BS	QC512571	Water	155040	09/22/09 02:44	5.0	2	
098	09i21k00098	BSD	QC512572	Water	155040	09/22/09 02:54	5.0	2	
099	09i21k00099	MSS	214809-001	Water	155040	09/22/09 03:04	5.0	2	
100	09i21k00100	SER	QC512575	Water	155040	09/22/09 03:14	25.0	2	
101	09i21k00101	MS	QC512573	Water	155040	09/22/09 03:24	5.0	2	
102	09i21k00102	CCV				09/22/09 03:34	1.0	12 2	
103	09i21k00103	CCB				09/22/09 03:44	1.0	2	
104	09i21k00104	MSD	QC512574	Water	155040	09/22/09 03:54	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019380797

Instrument : MET26 Begun : 09/21/09 10:37
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09i21k00105	PDS	QC512576	Water	155040	09/22/09 04:04	5.0	13 14 2	
106	09i21k00106	SAMPLE	214947-001	Water	155040	09/22/09 04:14	5.0	2	
107	09i21k00107	SAMPLE	214947-002	Water	155040	09/22/09 04:25	5.0	2	
108	09i21k00108	MSS	214809-002	Water	155040	09/22/09 04:35	5.0	2	
109	09i21k00109	MS	QC512577	Water	155040	09/22/09 04:45	5.0	2	
110	09i21k00110	MSD	QC512578	Water	155040	09/22/09 04:55	5.0	2	
111	09i21k00111	SAMPLE	214809-004	Water	155040	09/22/09 05:05	5.0	2	
112	09i21k00112	SAMPLE	214865-001	Water	155040	09/22/09 05:15	5.0	2	
113	09i21k00113	SAMPLE	214919-001	Water	155040	09/22/09 05:25	5.0	2	3:NA=200000
114	09i21k00114	CCV				09/22/09 05:35	1.0	12 2	
115	09i21k00115	CCB				09/22/09 05:45	1.0	2	
116	09i21k00116	SAMPLE	214919-003	Water	155040	09/22/09 05:56	5.0	2	3:NA=200000
117	09i21k00117	SAMPLE	214922-003	Water	155040	09/22/09 06:06	5.0	2	1:NA=40000
118	09i21k00118	SAMPLE	214922-004	Water	155040	09/22/09 06:16	5.0	2	2:NA=52000
119	09i21k00119	SAMPLE	214924-002	Water	155040	09/22/09 06:26	5.0	2	1:NA=33000
120	09i21k00120	SAMPLE	214924-003	Water	155040	09/22/09 06:36	5.0	2	1:NA=49000
121	09i21k00121	SAMPLE	214924-004	Water	155040	09/22/09 06:47	5.0	2	1:NA=47000
122	09i21k00122	SAMPLE	214924-005	Water	155040	09/22/09 06:57	5.0	2	1:NA=50000
123	09i21k00123	TUN				09/22/09 07:08	1.0	1	
124	09i21k00124	X	RINSE			09/22/09 07:14	1.0	2	
125	09i21k00125	SAMPLE	214924-006	Water	155040	09/22/09 07:25	5.0	2	1:NA=51000
126	09i21k00126	SAMPLE	214924-007	Water	155040	09/22/09 07:35	5.0	2	1:NA=50000
127	09i21k00127	SAMPLE	214924-009	Water	155040	09/22/09 07:45	5.0	2	1:NA=43000
128	09i21k00128	CCV				09/22/09 07:55	1.0	12 2	
129	09i21k00129	CCB				09/22/09 08:05	1.0	2	
130	09i21k00130	SAMPLE	214940-002	Water	155040	09/22/09 08:15	5.0	2	1:NA=23000
131	09i21k00131	SAMPLE	214940-003	Water	155040	09/22/09 08:25	5.0	2	
132	09i21k00132	SAMPLE	214940-004	Water	155040	09/22/09 08:35	5.0	2	
133	09i21k00133	SAMPLE	214901-008	Water	154979	09/22/09 08:49	5.0	2	1:NA=31000
134	09i21k00134	SAMPLE	214901-009	Water	154979	09/22/09 08:59	5.0	2	
135	09i21k00135	SAMPLE	214901-010	Water	154979	09/22/09 09:13	10.0	2	
136	09i21k00136	SAMPLE	214954-001	Water	155100	09/22/09 09:23	5.0	2	
137	09i21k00137	CCV				09/22/09 09:33	1.0	12 2	
138	09i21k00138	CCB				09/22/09 09:43	1.0	2	
139	09i21k00139	ICSA				09/22/09 09:51	1.0	10 2	7:CA=310000
140	09i21k00140	ICSAB				09/22/09 10:02	1.0	11 2	12:CA=320000

JYF 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 140.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019380797

Date : 09/21/09 Reference : 09i21k00005
Sequence : MET26 09i21k00 Analyzed : 09/21/09 11:14

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1494592	4898830	45610	1140935	313689	35119	5839369	3579773	6860220	6802972
		LOWER LIMIT	448378	1469649	13683	342281	94107	10536	1751811	1073932	2058066	2040892
		UPPER LIMIT	1793510	5878596	54732	1369122	376427	42143	7007243	4295728	8232264	8163566
014	ICSA		1296970	4667039	46262	1250542	321984	35659	5146439	3022752	6557161	6389560
015	ICSAB		1340078	4680726	46289	1262872	325822	35757	5144466	2969029	6564741	6383915
018	BS	QC512532	1430134	4687955	44758	1255323	334718	34627	5677258	3734483	6678656	6815781
019	BSD	QC512533	1338295	4672896	43997	1236864	331333	34264	5639441	3743024	6639871	6775317
020	SAMPLE	214812-008	1409836	4851985	45916	1293196	339329	34962	5557539	3674578	6782425	6795311
021	SAMPLE	214812-009	1366697	4549264	45503	1284401	339170	35173	5311869	3481417	6478427	6463079
022	MSS	214895-001	1462313	4655925	44861	1254659	342287	35306	5613704	3721047	6630298	6817712
023	BLANK	QC512602	1419675	4681498	47487	1322519	338123	35026	5663765	3659830	6670973	6819153
024	MSS	214842-001	1445588	4753338	45840	1164192	321331	35507	5798249	3797503	6754277	6917219
025	CCV		1479665	4776908	46316	1280744	341024	35550	5651442	3573597	6742531	6830681
026	CCB		1481881	4779220	44182	1278041	344620	34354	5785428	3688251	6777569	6897472
032	BLANK	QC512401	1452245	4713488	45797	1255808	337949	35486	5635246	3627199	6699311	6730547
033	SAMPLE	214900-002	1427613	4748996	44998	1267231	338154	34890	5741730	3682824	6692083	6759649
034	SAMPLE	214901-008	1305776	4267805	45694	1259606	342049	35747	5280989	3421724	6129734	6268931
035	SAMPLE	214901-009	1360947	4648869	45251	1235289	334593	35153	5670896	3715992	6631448	6821213
036	SAMPLE	214901-010	1120392	4388097	41916	1185405	339725	35319	5430846	3731274	6337665	6648272
037	MSS	214847-001	1249693	4543367	43154	1226197	330958	34025	5481470	3752242	6576115	6790578
038	SER	QC512538	1261216	4494603	42387	1220732	330895	33213	5495325	3736304	6491588	6728016
039	PDS	QC512539	1216512	4560084	43344	1233040	327455	34085	5361334	3572626	6575678	6717797
040	CCV		1351761	4671559	45147	1237743	332783	34679	5520179	3521907	6610233	6742544
041	CCB		1300788	4306092	45358	1243122	335098	35159	5282517	3421120	6166644	6301971
042	SAMPLE	214901-008	1338945	4604388	45062	1244512	338089	35107	5648555	3652060	6593571	6734867
043	SAMPLE	214901-009	1295309	4563426	44504	1230416	332199	34702	5578085	3652548	6507638	6716550
044	SAMPLE	214901-010	1076759	4398638	39524	1175972	338128	33800	5445906	3697165	6334801	6693003
045	CCV		1305192	4646223	44640	1244888	331606	34528	5525192	3494717	6583561	6711038
046	CCB		1281135	4466803	45582	1239573	336054	35319	5480547	3469957	6375281	6479077
047	SAMPLE	214901-008	1270137	4605531	44969	1242654	339005	35294	5669108	3684438	6595795	6779016
048	CCV		1319083	4696584	45302	1261953	335105	35012	5588159	3545993	6666213	6740749
049	CCB		1332398	4651589	44578	1242597	338746	34599	5677464	3642946	6649282	6765812
050	BLANK	QC512730	1324771	4605287	45128	1237436	335614	35044	5643804	3685285	6577644	6715783
051	BS	QC512731	1327094	4641319	44988	1254299	334918	35120	5626992	3661631	6613151	6750386
052	BSD	QC512732	1267182	4385294	45055	1249905	333361	34786	5313883	3519800	6237101	6420751
053	MSS	214959-001	1265057	4563595	43728	1246104	336370	34800	5602660	3699115	6537728	6689423
054	SER	QC512735	1250693	4580559	44232	1229891	336079	34958	5656120	3744827	6592071	6800666
055	MS	QC512733	1253003	4566573	44022	1232657	333217	34909	5595546	3620241	6541401	6784300
056	MSD	QC512734	1244540	4608754	43950	1218412	329550	34605	5623411	3648635	6620633	6840287
057	PDS	QC512736	1275725	4631825	44165	1233264	331186	34612	5549364	3572960	6606918	6848631
058	SAMPLE	214959-005	1334621	5115403	44687	1236922	337179	35626	6267249	4006132	7265689	7544978
059	SAMPLE	214959-007	1301666	4717266	45289	1249055	340009	35924	5734137	3726718	6645996	6836389
060	CCV		1228832	4623429	44657	1261787	335576	35123	5611763	3608927	6636673	6797862
061	CCB		1264017	4665205	45134	1251668	337980	35321	5740470	3687504	6658371	6852328
064	SAMPLE	214959-008	1179381	4388348	44796	1237143	337554	35679	5479040	3584798	6301694	6456700
065	SAMPLE	214959-009	1205718	4606816	44142	1238280	333335	34667	5641705	3598143	6558435	6820876
066	SAMPLE	214959-010	1205095	4600568	43914	1229457	331953	34819	5603947	3590574	6594120	6774695
067	SAMPLE	214959-011	1152873	4579274	42146	1200591	328457	33219	5597157	3619088	6515565	6788509
068	SAMPLE	214959-013	1209766	4562376	43090	1198783	330761	34423	5614986	3689075	6496571	6709788
071	BLANK	QC512799	1133819	4335833	42655	1195565	324352	33957	5440316	3589818	6270337	6512027
072	BS	QC512800	1187327	4492197	43216	1190608	323106	33871	5530047	3634428	6468931	6729575

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019380797

Date : 09/21/09 Reference : 09i21k00005
Sequence : MET26 09i21k00 Analyzed : 09/21/09 11:14

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
073	BSD	QC512801	1169078	4466449	41968	1108919	302338	33476	5537668	3644613	6470336	6705984
075	MS	QC512802	1116062	4446509	41687	1179978	316055	33394	5445284	3476614	6419915	6683075
076	MSD	QC512803	1137703	4500066	41833	1180788	317795	33378	5473429	3503698	6489685	6747376
086	CCV		1173381	4438682	40091	1189267	318022	32168	5456165	3596411	6417696	6795017
087	CCB		1136684	4386394	41733	1178133	319252	33461	5538920	3708324	6415528	6770996
096	BLANK	QC512570	1336970	4467074	40202	1181613	321730	32623	5609921	3777825	6454858	6821558
097	BS	QC512571	1317255	4426750	40959	1165938	315369	33209	5483280	3746700	6374954	6768692
098	BSD	QC512572	1255737	4216184	41210	1163243	315002	32907	5273321	3605605	6070640	6479247
099	MSS	214809-001	1250635	4403574	41129	1251095	337549	33374	5508687	3786101	6347991	6800991
100	SER	QC512575	1248617	4273577	39772	1094316	301851	32528	5456833	3747560	6227330	6706996
101	MS	QC512573	1254545	4248092	38625	1105143	300584	31684	5314998	3739563	6151293	6702059
102	CCV		1250163	4252807	38314	1115748	300777	30826	5211200	3641773	6102004	6599765
103	CCB		1246835	4205431	38877	1117864	302778	31720	5334895	3724199	6116773	6620688
104	MSD	QC512574	1232421	4174728	38472	1119673	303401	31589	5224873	3710148	6037725	6580704
105	PDS	QC512576	1338288	4274196	38834	1179123	315323	31231	5254900	3661002	6161544	6668121
106	SAMPLE	214947-001	1186093	4017382	38649	1111539	301374	31641	5020609	3502845	5794766	6276996
107	SAMPLE	214947-002	1271160	4194439	38152	1101567	301602	31179	5226291	3706476	6003590	6602186
108	MSS	214809-002	1229621	4138134	38079	1102481	299701	31201	5207606	3767877	5996994	6548054
109	MS	QC512577	1213035	4158337	37636	1098766	298286	30938	5266217	3775353	6060260	6718066
110	MSD	QC512578	1206747	4201841	38096	1096066	299322	31146	5324246	3768219	6112108	6777753
111	SAMPLE	214809-004	1222986	4155219	37985	1116703	301162	31149	5303408	3758179	6031363	6631671
112	SAMPLE	214865-001	1226959	4195564	37985	1079958	295170	30987	5335440	3822937	6081406	6694336
113	SAMPLE	214919-001	1323084	4315310	39330	1106078	292217	30618	5055151	3235679	6056303	6361579
114	CCV		1263369	4316134	38523	1143359	306637	30943	5297768	3647734	6210281	6665422
115	CCB		1250314	4307424	39198	1206436	323432	32076	5415642	3747453	6238419	6740928
116	SAMPLE	214919-003	1343933	4338472	40336	1123084	294806	31411	5087017	3165176	6091369	6251350
117	SAMPLE	214922-003	1315109	4307831	40240	1144744	309105	32534	5238386	3563433	6171135	6489437
118	SAMPLE	214922-004	1331067	4276388	39568	1128922	302113	31804	5288977	3562489	6121871	6628241
119	SAMPLE	214924-002	1313996	4256954	39221	1031092	282461	31641	5261694	3634978	6133218	6555013
120	SAMPLE	214924-003	1323134	4249651	37483	1105319	299344	30505	5176979	3619025	6023322	6538422
121	SAMPLE	214924-004	1327112	4222304	38569	1101891	297625	31238	5196489	3628055	6052351	6525385
122	SAMPLE	214924-005	1312760	4222732	38396	1083705	287029	31416	5220014	3628141	6021279	6544046
125	SAMPLE	214924-006	1245342	4053994	37557	1070491	293019	30521	5054459	3557803	5855749	6371427
126	SAMPLE	214924-007	1279232	4148961	37636	1068118	292164	30593	5166327	3584693	5928751	6500163
127	SAMPLE	214924-009	1264096	4152373	37215	1081534	290471	30346	5135813	3546074	5950940	6527893
130	SAMPLE	214940-002	1260840	4172668	38078	1074715	292967	30981	5212294	3673804	5991560	6564648
131	SAMPLE	214940-003	1251289	4142516	35770	1070978	289123	29426	5243994	3797354	6023871	6551988
132	SAMPLE	214940-004	1247990	4127218	36851	956474	262794	30058	5181340	3717415	5951167	6602906
133	SAMPLE	214901-008	985122	3863925	34931	1020207	289883	29969	4998672	3716839	5693950	6508536
134	SAMPLE	214901-009	968751	3868214	34306	1024183	290932	29543	5061918	3786059	5735051	6485264
135	SAMPLE	214901-010	1053653	3985541	34528	1025107	287560	29406	5129920	3740003	5827907	6584059

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019380797

Date : 09/21/09 Reference : 09i21k00005
Sequence : MET26 09i21k00 Analyzed : 09/21/09 11:14

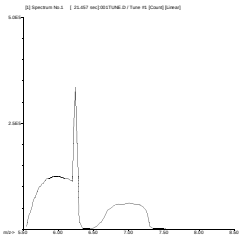
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1494592	4898830	45610	1140935	313689	35119	5839369	3579773	6860220	6802972
		LOWER LIMIT	896755	2939298	27366	684561	188213	21071	3503621	2147864	4116132	4081783
		UPPER LIMIT	1868240	6123538	57013	1426169	392111	43899	7299211	4474716	8575275	8503715
013	ICB		1466481	4468881	46190	1253932	339774	35435	5345762	3362475	6310929	6245256
027	ICSA		1376767	4684291	47105	1256465	327137	36360	5142843	3022093	6567168	6404300
028	ICSAB		1328629	4639855	46617	1254846	326994	35673	5028945	2936535	6510259	6299668
069	CCV		1180103	4528729	42783	1201000	323471	33837	5496418	3564740	6498626	6717760
070	CCB		1190339	4500566	42945	1198521	325233	33875	5642711	3644893	6498913	6751475
074	MSS	214956-001	1144183	4490323	42370	1189110	320815	33229	5470852	3494762	6422000	6641265
077	SAMPLE	214954-001	1149782	4372990	39699	1173048	322929	32736	5567255	3702583	6442586	6705981
078	SAMPLE	214954-002	1145630	4377774	41490	1167600	323772	33936	5540891	3657203	6439440	6703157
079	SAMPLE	214954-003	1159186	4326745	39722	1168150	324090	32682	5512414	3650103	6403581	6757543
080	SAMPLE	214954-004	1170137	4381687	41337	1162686	321281	33695	5500224	3621761	6373777	6733357
081	CCV		1152073	4460202	40984	1198312	317436	32341	5483848	3578325	6397061	6717694
082	CCB		1144755	4438371	42000	1190681	322388	33957	5615724	3692725	6441855	6808364
083	SAMPLE	214956-002	1175405	4508160	42397	1184637	318783	33587	5479288	3477472	6440153	6689104
084	SAMPLE	214956-003	1222569	4435696	41771	1151979	316802	33491	5443284	3478602	6339622	6685418
085	SAMPLE	214956-004	1190621	4437394	42296	1185200	318646	33640	5416146	3474477	6355468	6609093
089	ICSA		1099702	4392536	43032	1181987	306590	34013	4947406	2964750	6265393	6306760
090	ICSAB		1147088	4359663	41204	1173491	305658	32926	4917195	2945951	6236438	6281580
128	CCV		1207603	4181091	37053	1097416	293363	30248	5146606	3638752	6001993	6576386
129	CCB		1212695	4152660	37561	1082374	294035	30547	5231347	3716238	5972446	6561312
136	SAMPLE	214954-001	1188853	4049205	35874	1054953	292339	29874	5150926	3720199	5927181	6614879
137	CCV		1171833	4118006	36733	1074473	288106	29768	5102767	3607479	5913375	6543638
138	CCB		1167989	4110251	36340	1079994	293184	29994	5238064	3715426	5964604	6628495
139	ICSA		1047614	4121953	37594	1076203	276252	30473	4652590	2965040	5883713	6025051
140	ICSAB		1120557	4116974	37883	1082306	280596	30367	4631871	2881698	5855221	6036692

MET26 QC Tune Report

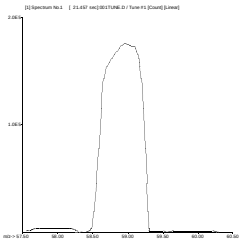
Data File: C:\ICPCHEM\1\DATA\09I21k00.B\001TUNE.D
Date Acquired: Sep 21 2009 10:37 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

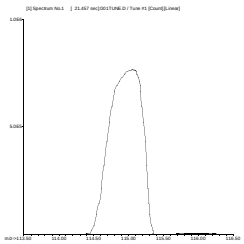
Element	Actual	Required	Flag
7 Li	2.83	5.00	
59 Co	0.86	5.00	
115 In	1.74	5.00	
205 Tl	1.53	5.00	



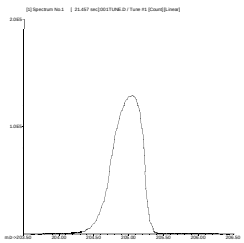
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



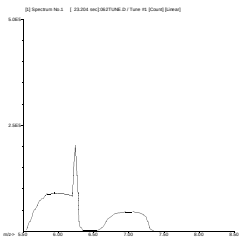
205 Tl
Mass Calib.
Actual: 205.05
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET26 QC Tune Report

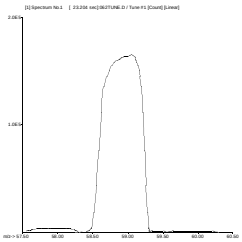
Data File: C:\ICPCHEM\1\DATA\09I21k00.B\062TUNE.D
Date Acquired: Sep 21 2009 08:52 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

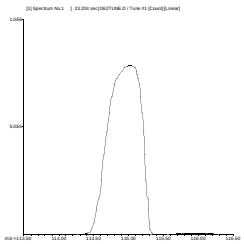
Element	Actual	Required	Flag
7 Li	1.70	5.00	
59 Co	0.97	5.00	
115 In	0.40	5.00	
205 Tl	0.96	5.00	



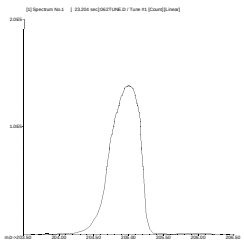
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



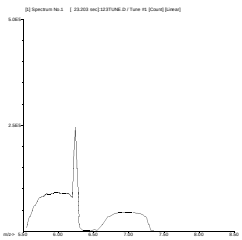
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

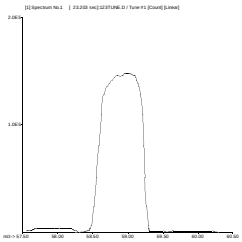
Data File: C:\ICPCHEM\1\DATA\09I21k00.B\123TUNE.D
Date Acquired: Sep 22 2009 07:08 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

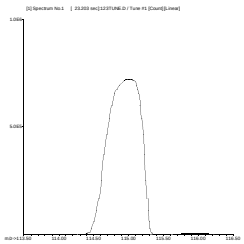
Element	Actual	Required	Flag
7 Li	1.21	5.00	
59 Co	0.79	5.00	
115 In	0.69	5.00	
205 Tl	1.31	5.00	



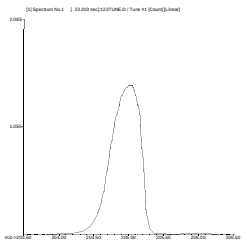
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 METALS Water: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019380797001 Date : 21-SEP-2009 11:14
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i21k00006	1019380797006		21-SEP-2009 11:25	S12854, S12847
L2	09i21k00007	1019380797007		21-SEP-2009 11:36	S12855, S12847
L3	09i21k00008	1019380797008		21-SEP-2009 11:46	S12856, S12847
L4	09i21k00009	1019380797009		21-SEP-2009 11:56	S12857, S12847
L5	09i21k00010	1019380797010		21-SEP-2009 12:06	S12852, S12847
L6	09i21k00011	1019380797011		21-SEP-2009 12:16	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0058	0.0046	0.0044	0.0043	0.0043	0.0042	BLNK	-4.2200	239.072		0.0046	1.000	0.995	
Antimony	A	0.0065	0.0027	0.0026	0.0025	0.0027	0.0026	BLNK	-0.0073	376.687		0.0033	1.000	0.995	
Barium	A	0.0014	8.7E-4	8.3E-4	7.9E-4	7.8E-4	8.2E-4	BLNK	-0.0283	1230.12		9.1E-4	0.999	0.995	
Beryllium	A	0.0033	0.0028	0.0026	0.0026	0.0026	0.0027	BLNK	-0.0166	373.359		0.0028	1.000	0.995	
Cadmium	A	9.1E-4	7.0E-4	6.8E-4	6.7E-4	6.5E-4	6.9E-4	BLNK	-0.0132	1472.63		7.2E-4	0.999	0.995	
Calcium	A	0.0012	3.7E-4	2.6E-4	1.9E-4	1.8E-4	1.7E-4	BLNK	-56.398	5731.51		3.9E-4	1.000	0.995	
Lead	A	0.0163	0.0071	0.0059	0.0048	0.0048	0.0047	BLNK	-0.2309	212.384		0.0073	1.000	0.995	
Magnesium	A	0.0047	0.0036	0.0034	0.0033	0.0033	0.0032	BLNK	-2.4379	313.221		0.0036	1.000	0.995	
Potassium	A	0.0874	0.0222	0.0138	0.0065	0.0058	0.0056	BLNK	-143.29	177.471		0.0236	1.000	0.995	
Silver	A	0.0045	0.0034	0.0033	0.0032	0.0033	0.0032	BLNK	-0.0126	310.270		0.0035	1.000	0.995	
Thallium	A	0.0092	0.0065	0.0065	0.0063	0.0070	0.0068	BLNK	-0.0185	145.644		0.0071	1.000	0.995	
Arsenic	E	0.0086	0.0064	0.0059	0.0059	0.0057	0.0058	BLNK	-0.0363	173.744		0.0064	1.000	0.995	
Chromium	E	0.1905	0.0704	0.0590	0.0458	0.0432	0.0444	BLNK	-0.2576	22.6968		0.0755	1.000	0.995	
Manganese	E	0.0289	0.0164	0.0156	0.0153	0.0146	0.0150	BLNK	-0.0257	67.1045		0.0176	1.000	0.995	
Nickel	E	0.0468	0.0288	0.0269	0.0253	0.0237	0.0241	BLNK	-0.0470	41.6305		0.0293	1.000	0.995	
Sodium	E	0.0299	0.0091	0.0066	0.0044	0.0040	0.0041	BLNK	-64.084	246.704		0.0097	1.000	0.995	
Zinc	E	0.1161	0.0334	0.0208	0.0103	0.0091	0.0090	BLNK	-0.2933	110.801		0.0331	1.000	0.995	
Iron	H	0.0116	0.0081	0.0081	0.0076	0.0075	0.0075	BLNK	-3.8205	133.845		0.0084	1.000	0.995	
Selenium	H	0.0012	0.0010	0.0011	0.0010	10.0E-4	9.8E-4	BLNK	-0.0231	1016.33		0.0010	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	-4	50.00	1	100.0	0	1000	1	10000	2	20000	0
Antimony	A	0.100	137	0.500	0	1.000	-2	10.00	-5	100.0	2	200.0	0
Barium	A	0.100	41	0.500	2	1.000	0	10.00	-3	100.0	-4	200.0	1
Beryllium	A	0.100	6	0.500	0	1.000	-4	10.00	-2	100.0	-2	200.0	1
Cadmium	A	0.100	20	0.500	1	1.000	-1	10.00	-2	100.0	-4	200.0	1
Calcium	A	10.00	13	50.00	-1	100.0	-5	1000	5	10000	2	20000	-1
Lead	A	0.100	15	0.500	5	1.000	2	10.00	0	100.0	3	200.0	-1
Magnesium	A	10.00	23	50.00	8	100.0	5	1000	3	10000	2	20000	-1
Potassium	A	10.00	19	50.00	7	100.0	1	1000	2	10000	2	20000	-1
Silver	A	0.100	26	0.500	4	1.000	0	10.00	-2	100.0	2	200.0	-1
Thallium	A	0.050	-3	0.250	-13	0.500	-10	5.000	-8	50.00	2	100.0	0
Arsenic	E	0.100	13	0.500	3	1.000	-1	10.00	1	100.0	-2	200.0	0
Chromium	E	0.100	75	0.500	8	1.000	8	10.00	1	100.0	-2	200.0	1
Manganese	E	0.100	68	0.500	5	1.000	2	10.00	3	100.0	-2	200.0	0
Nickel	E	0.100	48	0.500	10	1.000	7	10.00	5	100.0	-1	200.0	0
Sodium	E	10.00	-3	50.00	-5	100.0	-2	1000	2	10000	-1	20000	0
Zinc	E	0.100	893	0.500	211	1.000	101	10.00	12	100.0	0	200.0	0
Iron	H	10.00	17	50.00	0	100.0	5	1000	2	10000	0	20000	0
Selenium	H	0.100	-1	0.500	-3	1.000	5	10.00	3	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 METALS Water
EPA 6020

Inst : MET26
Calnum : 1019380797001 Cal Date : 21-SEP-2009

ICV 1019380797012 (09i21k00012 21-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10360	ug/L	4	10	
Antimony	A	100.0	103.8	ug/L	4	10	
Barium	A	100.0	96.96	ug/L	-3	10	
Beryllium	A	100.0	97.87	ug/L	-2	10	
Cadmium	A	100.0	95.40	ug/L	-5	10	
Calcium	A	10000	10090	ug/L	1	10	
Lead	A	100.0	101.7	ug/L	2	10	
Magnesium	A	10000	10280	ug/L	3	10	
Potassium	A	10000	10330	ug/L	3	10	
Silver	A	100.0	107.8	ug/L	8	10	
Thallium	A	50.00	51.42	ug/L	3	10	
Arsenic	E	100.0	100.4	ug/L	0	10	
Chromium	E	100.0	99.20	ug/L	-1	10	
Manganese	E	100.0	97.68	ug/L	-2	10	
Nickel	E	100.0	99.46	ug/L	-1	10	
Sodium	E	10000	9922	ug/L	-1	10	
Zinc	E	100.0	99.59	ug/L	0	10	
Iron	H	10000	10120	ug/L	1	10	
Selenium	H	100.0	101.5	ug/L	2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797013.1 File : 09i21k00013 Time : 21-SEP-2009 12:36
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	[0.05110]	0.1000	0.03964	ug/L	!ib
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	14.77	10.00	5.867	ug/L	ib ***
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03730]	0.05000	0.01103	ug/L	!ib
Arsenic	E	[0.04740]	0.1000	0.04565	ug/L	!ib
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1466481	-1.88
Scandium	A	4898830	4468881	-8.78
Scandium	E	45610	46190	1.27
Scandium	H	1140935	1253932	9.90
Germanium	H	313689	339774	8.32
Germanium	E	35119	35435	0.90
Indium	A	5839369	5345762	-8.45
Bismuth	A	3579773	3362475	-6.07
Yttrium	A	6860220	6310929	-8.01
Terbium	A	6802972	6245256	-8.20

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797086 File : 09i21k00086 Time : 22-SEP-2009 00:51
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0041	10000	9725	ug/L	-3	10	
Antimony	A	0.0033	0.0028	100.0	104.6	ug/L	5	10	
Barium	A	9.1E-4	7.5E-4	100.0	92.46	ug/L	-8	10	
Beryllium	A	0.0028	0.0028	100.0	104.3	ug/L	4	10	
Cadmium	A	7.2E-4	6.6E-4	100.0	96.49	ug/L	-4	10	
Calcium	A	3.9E-4	1.8E-4	10000	9976	ug/L	0	10	
Lead	A	0.0073	0.0049	100.0	103.3	ug/L	3	10	
Magnesium	A	0.0036	0.0030	10000	9542	ug/L	-5	10	
Potassium	A	0.0236	0.0057	10000	10010	ug/L	0	10	
Silver	A	0.0035	0.0035	100.0	107.3	ug/L	7	10	
Thallium	A	0.0071	0.0070	50.00	51.29	ug/L	3	10	
Arsenic	E	0.0064	0.0060	100.0	104.3	ug/L	4	10	
Chromium	E	0.0755	0.0464	100.0	105.0	ug/L	5	10	
Manganese	E	0.0176	0.0151	100.0	101.4	ug/L	1	10	
Nickel	E	0.0293	0.0255	100.0	106.1	ug/L	6	10	
Sodium	E	0.0097	0.0041	10000	10160	ug/L	2	10	
Zinc	E	0.0331	0.0094	100.0	103.7	ug/L	4	10	
Iron	H	0.0084	0.0076	10000	10230	ug/L	2	10	
Selenium	H	0.0010	0.0010	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1173381	-21.49
Scandium	A	4898830	4438682	-9.39
Scandium	E	45610	40091	-12.10
Scandium	H	1140935	1189267	4.24
Germanium	H	313689	318022	1.38
Germanium	E	35119	32168	-8.40
Indium	A	5839369	5456165	-6.56
Bismuth	A	3579773	3596411	0.46
Yttrium	A	6860220	6417696	-6.45
Terbium	A	6802972	6795017	-0.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797087 File : 09i21k00087 Time : 22-SEP-2009 01:01
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02820]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1136684	-23.95
Scandium	A	4898830	4386394	-10.46
Scandium	E	45610	41733	-8.50
Scandium	H	1140935	1178133	3.26
Germanium	H	313689	319252	1.77
Germanium	E	35119	33461	-4.72
Indium	A	5839369	5538920	-5.15
Bismuth	A	3579773	3708324	3.59
Yttrium	A	6860220	6415528	-6.48
Terbium	A	6802972	6770996	-0.47

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797089.1 File : 09i21k00089 Time : 22-SEP-2009 01:22
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2830	0.1000	ug/L	!a+
Barium	A	1.322	0.1000	ug/L	!a+
Beryllium	A	[0.02030]	0.1000	ug/L	
Cadmium	A	2.721	0.1000	ug/L	!a+
Lead	A	1.298	0.1000	ug/L	!a+
Silver	A	0.1799	0.1000	ug/L	!a+
Thallium	A	0.08210	0.05000	ug/L	!a+
Arsenic	E	0.3507	0.1000	ug/L	!a+
Chromium	E	1.138	0.1000	ug/L	!a+
Manganese	E	6.198	0.1000	ug/L	!a+
Nickel	E	3.788	0.1000	ug/L	!a+
Zinc	E	6.387	0.1000	ug/L	!a+
Selenium	H	0.2304	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102000	ug/L	102
Calcium	A	300000	316400	ug/L	105
Magnesium	A	100000	98440	ug/L	98
Molybdenum	A	2000	2034	ug/L	102
Potassium	A	100000	0	ug/L	0
Sodium	E	250000	244700	ug/L	98
Iron	H	250000	258800	ug/L	104

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1099702	-26.42
Scandium	A	4898830	4392536	-10.33
Scandium	E	45610	43032	-5.65
Scandium	H	1140935	1181987	3.60
Germanium	H	313689	306590	-2.26
Germanium	E	35119	34013	-3.15
Indium	A	5839369	4947406	-15.27
Bismuth	A	3579773	2964750	-17.18
Yttrium	A	6860220	6265393	-8.67
Terbium	A	6802972	6306760	-7.29

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797090.1 File : 09i21k00090 Time : 22-SEP-2009 01:32
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105800	ug/L	6		
Cadmium	A	100.0	104.2	ug/L	4	20	
Calcium	A	300000	324500	ug/L	8		
Magnesium	A	100000	101600	ug/L	2		
Potassium	A	100000	0	ug/L	-100		sat ***
Silver	A	50.00	54.71	ug/L	9	20	
Arsenic	E	100.0	110.3	ug/L	10	20	
Chromium	E	200.0	217.0	ug/L	9	20	
Manganese	E	200.0	217.2	ug/L	9	20	
Nickel	E	200.0	203.3	ug/L	2	20	
Sodium	E	250000	257200	ug/L	3		
Zinc	E	100.0	100.9	ug/L	1	20	
Iron	H	250000	263200	ug/L	5		
Selenium	H	100.0	110.9	ug/L	11	20	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1140935	1173491	2.85
Scandium	A	4898830	4359663	-11.01
Scandium	E	45610	41204	-9.66
Germanium	H	313689	305658	-2.56
Germanium	E	35119	32926	-6.24
Indium	A	5839369	4917195	-15.79
Yttrium	A	6860220	6236438	-9.09

sat=saturated

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797102 File : 09i21k00102 Time : 22-SEP-2009 03:34
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0041	10000	9813	ug/L	-2	10	
Antimony	A	0.0033	0.0028	100.0	104.1	ug/L	4	10	
Barium	A	9.1E-4	7.4E-4	100.0	91.47	ug/L	-9	10	
Beryllium	A	0.0028	0.0027	100.0	99.53	ug/L	0	10	
Cadmium	A	7.2E-4	6.5E-4	100.0	95.21	ug/L	-5	10	
Calcium	A	3.9E-4	1.7E-4	10000	9893	ug/L	-1	10	
Lead	A	0.0073	0.0051	100.0	107.0	ug/L	7	10	
Magnesium	A	0.0036	0.0031	10000	9683	ug/L	-3	10	
Potassium	A	0.0236	0.0057	10000	9933	ug/L	-1	10	
Silver	A	0.0035	0.0035	100.0	107.4	ug/L	7	10	
Thallium	A	0.0071	0.0069	50.00	50.42	ug/L	1	10	
Arsenic	E	0.0064	0.0058	100.0	100.7	ug/L	1	10	
Chromium	E	0.0755	0.0447	100.0	101.2	ug/L	1	10	
Manganese	E	0.0176	0.0146	100.0	97.71	ug/L	-2	10	
Nickel	E	0.0293	0.0248	100.0	103.3	ug/L	3	10	
Sodium	E	0.0097	0.0040	10000	9854	ug/L	-1	10	
Zinc	E	0.0331	0.0091	100.0	100.3	ug/L	0	10	
Iron	H	0.0084	0.0076	10000	10190	ug/L	2	10	
Selenium	H	0.0010	0.0010	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1250163	-16.35
Scandium	A	4898830	4252807	-13.19
Scandium	E	45610	38314	-16.00
Scandium	H	1140935	1115748	-2.21
Germanium	H	313689	300777	-4.12
Germanium	E	35119	30826	-12.22
Indium	A	5839369	5211200	-10.76
Bismuth	A	3579773	3641773	1.73
Yttrium	A	6860220	6102004	-11.05
Terbium	A	6802972	6599765	-2.99

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797103 File : 09i21k00103 Time : 22-SEP-2009 03:44
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03590]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1246835	-16.58
Scandium	A	4898830	4205431	-14.15
Scandium	E	45610	38877	-14.76
Scandium	H	1140935	1117864	-2.02
Germanium	H	313689	302778	-3.48
Germanium	E	35119	31720	-9.68
Indium	A	5839369	5334895	-8.64
Bismuth	A	3579773	3724199	4.03
Yttrium	A	6860220	6116773	-10.84
Terbium	A	6802972	6620688	-2.68

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797114 File : 09i21k00114 Time : 22-SEP-2009 05:35
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0041	10000	9745	ug/L	-3	10	
Antimony	A	0.0033	0.0027	100.0	102.8	ug/L	3	10	
Barium	A	9.1E-4	7.4E-4	100.0	91.35	ug/L	-9	10	
Beryllium	A	0.0028	0.0026	100.0	98.73	ug/L	-1	10	
Cadmium	A	7.2E-4	6.5E-4	100.0	95.04	ug/L	-5	10	
Calcium	A	3.9E-4	1.8E-4	10000	9982	ug/L	0	10	
Lead	A	0.0073	0.0050	100.0	106.5	ug/L	7	10	
Magnesium	A	0.0036	0.0031	10000	9656	ug/L	-3	10	
Potassium	A	0.0236	0.0057	10000	9961	ug/L	0	10	
Silver	A	0.0035	0.0034	100.0	106.9	ug/L	7	10	
Thallium	A	0.0071	0.0069	50.00	50.48	ug/L	1	10	
Arsenic	E	0.0064	0.0059	100.0	102.3	ug/L	2	10	
Chromium	E	0.0755	0.0454	100.0	102.8	ug/L	3	10	
Manganese	E	0.0176	0.0149	100.0	99.63	ug/L	0	10	
Nickel	E	0.0293	0.0251	100.0	104.6	ug/L	5	10	
Sodium	E	0.0097	0.0041	10000	10080	ug/L	1	10	
Zinc	E	0.0331	0.0092	100.0	101.7	ug/L	2	10	
Iron	H	0.0084	0.0076	10000	10130	ug/L	1	10	
Selenium	H	0.0010	0.0010	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1263369	-15.47
Scandium	A	4898830	4316134	-11.89
Scandium	E	45610	38523	-15.54
Scandium	H	1140935	1143359	0.21
Germanium	H	313689	306637	-2.25
Germanium	E	35119	30943	-11.89
Indium	A	5839369	5297768	-9.27
Bismuth	A	3579773	3647734	1.90
Yttrium	A	6860220	6210281	-9.47
Terbium	A	6802972	6665422	-2.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797115 File : 09i21k00115 Time : 22-SEP-2009 05:45
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03540]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1250314	-16.34
Scandium	A	4898830	4307424	-12.07
Scandium	E	45610	39198	-14.06
Scandium	H	1140935	1206436	5.74
Germanium	H	313689	323432	3.11
Germanium	E	35119	32076	-8.66
Indium	A	5839369	5415642	-7.26
Bismuth	A	3579773	3747453	4.68
Yttrium	A	6860220	6238419	-9.06
Terbium	A	6802972	6740928	-0.91

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797128.1 File : 09i21k00128 Time : 22-SEP-2009 07:55
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0046	0.0040	10000	9677	ug/L	-3	10	
Antimony	A	0.0033	0.0028	100.0	104.2	ug/L	4	10	
Barium	A	9.1E-4	7.3E-4	100.0	90.22	ug/L	-10	10	
Beryllium	A	0.0028	0.0027	100.0	100.6	ug/L	1	10	
Cadmium	A	7.2E-4	6.5E-4	100.0	95.21	ug/L	-5	10	
Calcium	A	3.9E-4	1.7E-4	10000	9898	ug/L	-1	10	
Lead	A	0.0073	0.0050	100.0	106.9	ug/L	7	10	
Magnesium	A	0.0036	0.0030	10000	9520	ug/L	-5	10	
Potassium	A	0.0236	0.0056	10000	9844	ug/L	-2	10	
Silver	A	0.0035	0.0034	100.0	106.1	ug/L	6	10	
Thallium	A	0.0071	0.0070	50.00	50.62	ug/L	1	10	
Arsenic	E	0.0064	0.0057	100.0	98.54	ug/L	-1	10	
Chromium	E	0.0755	0.0445	100.0	100.8	ug/L	1	10	
Manganese	E	0.0176	0.0144	100.0	96.93	ug/L	-3	10	
Nickel	E	0.0293	0.0248	100.0	103.4	ug/L	3	10	
Sodium	E	0.0097	0.0040	10000	9902	ug/L	-1	10	
Zinc	E	0.0331	0.0089	100.0	98.63	ug/L	-1	10	
Iron	H	0.0084	0.0076	10000	10150	ug/L	2	10	
Selenium	H	0.0010	0.0010	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1207603	-19.20
Scandium	A	4898830	4181091	-14.65
Scandium	E	45610	37053	-18.76
Scandium	H	1140935	1097416	-3.81
Germanium	H	313689	293363	-6.48
Germanium	E	35119	30248	-13.87
Indium	A	5839369	5146606	-11.86
Bismuth	A	3579773	3638752	1.65
Yttrium	A	6860220	6001993	-12.51
Terbium	A	6802972	6576386	-3.33

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797129.1 File : 09i21k00129 Time : 22-SEP-2009 08:05
Cal : 1019380797001 Caldate : 21-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03690]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1212695	-18.86
Scandium	A	4898830	4152660	-15.23
Scandium	E	45610	37561	-17.65
Scandium	H	1140935	1082374	-5.13
Germanium	H	313689	294035	-6.27
Germanium	E	35119	30547	-13.02
Indium	A	5839369	5231347	-10.41
Bismuth	A	3579773	3716238	3.81
Yttrium	A	6860220	5972446	-12.94
Terbium	A	6802972	6561312	-3.55

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797139.1 File : 09i21k00139 Time : 22-SEP-2009 09:51
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2947	0.1000	ug/L	!a+
Barium	A	1.314	0.1000	ug/L	!a+
Beryllium	A	[0.01980]	0.1000	ug/L	
Cadmium	A	2.689	0.1000	ug/L	!a+
Lead	A	1.321	0.1000	ug/L	!a+
Silver	A	0.1695	0.1000	ug/L	!a+
Thallium	A	0.09070	0.05000	ug/L	!a+
Arsenic	E	0.3589	0.1000	ug/L	!a+
Chromium	E	1.123	0.1000	ug/L	!a+
Manganese	E	6.211	0.1000	ug/L	!a+
Nickel	E	3.916	0.1000	ug/L	!a+
Zinc	E	6.251	0.1000	ug/L	!a+
Selenium	H	0.2236	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100900	ug/L	101
Calcium	A	300000	311900	ug/L	104
Magnesium	A	100000	97070	ug/L	97
Molybdenum	A	2000	2025	ug/L	101
Potassium	A	100000	102900	ug/L	103
Sodium	E	250000	249900	ug/L	100
Iron	H	250000	255600	ug/L	102

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1494592	1047614	-29.91
Scandium	A	4898830	4121953	-15.86
Scandium	E	45610	37594	-17.58
Scandium	H	1140935	1076203	-5.67
Germanium	H	313689	276252	-11.93
Germanium	E	35119	30473	-13.23
Indium	A	5839369	4652590	-20.32
Bismuth	A	3579773	2965040	-17.17
Yttrium	A	6860220	5883713	-14.23
Terbium	A	6802972	6025051	-11.44

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019380797140.1 File : 09i21k00140 Time : 22-SEP-2009 10:02
Cal : 1019380797001 Caldate : 21-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104100	ug/L	4		
Cadmium	A	100.0	103.5	ug/L	4	20	
Calcium	A	300000	321700	ug/L	7		
Magnesium	A	100000	101100	ug/L	1		
Potassium	A	100000	105000	ug/L	5		
Silver	A	50.00	54.53	ug/L	9	20	
Arsenic	E	100.0	108.2	ug/L	8	20	
Chromium	E	200.0	214.1	ug/L	7	20	
Manganese	E	200.0	212.8	ug/L	6	20	
Nickel	E	200.0	202.1	ug/L	1	20	
Sodium	E	250000	255500	ug/L	2		
Zinc	E	100.0	99.83	ug/L	0	20	
Iron	H	250000	263100	ug/L	5		
Selenium	H	100.0	111.8	ug/L	12	20	

ISTD (ICALBLK 09i21k00005)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1140935	1082306	-5.14
Scandium	A	4898830	4116974	-15.96
Scandium	E	45610	37883	-16.94
Germanium	H	313689	280596	-10.55
Germanium	E	35119	30367	-13.53
Indium	A	5839369	4631871	-20.68
Yttrium	A	6860220	5855221	-14.65

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69382287

Instrument : MET06 Begun : 09/22/09 11:27
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i22l00001	TUN				09/22/09 11:27	1.0	1	
002	09i22l00002	X	RINSE			09/22/09 11:34	1.0	2	
003	09i22l00003	ICALBLK	CALBLANK			09/22/09 11:45	1.0	2	
004	09i22l00004	ICAL				09/22/09 11:55	1.0	3 2	
005	09i22l00005	ICAL				09/22/09 12:05	1.0	4 2	
006	09i22l00006	ICAL				09/22/09 12:17	1.0	5 2	
007	09i22l00007	ICAL				09/22/09 12:27	1.0	6 2	
008	09i22l00008	ICAL				09/22/09 12:37	1.0	7 2	
009	09i22l00009	ICAL				09/22/09 12:48	1.0	8 2	
010	09i22l00010	ICV				09/22/09 12:58	1.0	9 2	
011	09i22l00011	ICB				09/22/09 13:08	1.0	2	
012	09i22l00012	ICSA				09/22/09 13:19	1.0	10 2	7:CA=280000
013	09i22l00013	X				09/22/09 13:29	1.0	11 2	10:CA=280000
014	09i22l00014	ICSAB				09/22/09 13:39	1.0	11 2	11:CA=290000
015	09i22l00015	X	RINSE			09/22/09 13:50	1.0	2	
016	09i22l00016	X	RINSE			09/22/09 14:00	1.0	2	
017	09i22l00017	BLANK	QC512570	Water	155040	09/22/09 14:11	5.0	2	
018	09i22l00018	BS	QC512571	Water	155040	09/22/09 14:21	5.0	2	
019	09i22l00019	BSD	QC512572	Water	155040	09/22/09 14:32	5.0	2	
020	09i22l00020	MSS	214809-001	Water	155040	09/22/09 14:42	5.0	2	
021	09i22l00021	SER	QC512575	Water	155040	09/22/09 14:52	25.0	2	
022	09i22l00022	MS	QC512573	Water	155040	09/22/09 15:03	5.0	2	
023	09i22l00023	MSD	QC512574	Water	155040	09/22/09 15:13	5.0	2	
024	09i22l00024	CCV				09/22/09 15:23	1.0	12 2	
025	09i22l00025	X				09/22/09 15:34	1.0	12 2	
026	09i22l00026	CCB				09/22/09 15:44	1.0	2	
027	09i22l00027	PDS	QC512576	Water	155040	09/22/09 15:54	5.0	13 14 2	
028	09i22l00028	MSS	214809-002	Water	155040	09/22/09 16:04	5.0	2	
029	09i22l00029	CCV				09/22/09 16:15	1.0	12 2	
030	09i22l00030	X				09/22/09 16:25	1.0	2	
031	09i22l00031	CCB				09/22/09 16:32	1.0	2	
032	09i22l00032	MS	QC512577	Water	155040	09/22/09 16:42	5.0	2	
033	09i22l00033	MSD	QC512578	Water	155040	09/22/09 16:52	5.0	2	
034	09i22l00034	SAMPLE	214940-002	Water	155040	09/22/09 17:03	5.0	2	
035	09i22l00035	SAMPLE	214940-003	Water	155040	09/22/09 17:13	5.0	2	
036	09i22l00036	SAMPLE	214940-004	Water	155040	09/22/09 17:24	5.0	2	
037	09i22l00037	CCV				09/22/09 17:34	1.0	12 2	
038	09i22l00038	X				09/22/09 17:44	1.0	2	
039	09i22l00039	CCB				09/22/09 17:55	1.0	2	
040	09i22l00040	BLANK	QC512570	Water	155040	09/22/09 18:05	5.0	2	
041	09i22l00041	BS	QC512571	Water	155040	09/22/09 18:16	5.0	2	
042	09i22l00042	BSD	QC512572	Water	155040	09/22/09 18:26	5.0	2	
043	09i22l00043	MSS	214809-001	Water	155040	09/22/09 18:36	5.0	2	
044	09i22l00044	SER	QC512575	Water	155040	09/22/09 18:47	25.0	2	
045	09i22l00045	MS	QC512573	Water	155040	09/22/09 18:57	5.0	2	
046	09i22l00046	MSD	QC512574	Water	155040	09/22/09 19:07	5.0	2	
047	09i22l00047	PDS	QC512576	Water	155040	09/22/09 19:18	5.0	13 14 2	
048	09i22l00048	MSS	214809-002	Water	155040	09/22/09 19:28	5.0	2	
049	09i22l00049	BLANK	QC512723	Filtrate	155082	09/22/09 19:39	5.0	2	
050	09i22l00050	CCV				09/22/09 19:49	1.0	12 2	
051	09i22l00051	X				09/22/09 19:59	1.0	2	
052	09i22l00052	CCB				09/22/09 20:10	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 69382287

Instrument : MET06 Begun : 09/22/09 11:27
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i22l00053	SAMPLE	214982-001	Filtrate	155082	09/22/09 20:20	5.0	2	
054	09i22l00054	SAMPLE	214982-002	Filtrate	155082	09/22/09 20:30	5.0	2	
055	09i22l00055	SAMPLE	214982-003	Filtrate	155082	09/22/09 20:41	5.0	2	
056	09i22l00056	SAMPLE	214982-004	Filtrate	155082	09/22/09 20:51	5.0	2	
057	09i22l00057	SAMPLE	214982-005	Filtrate	155082	09/22/09 21:02	5.0	2	
058	09i22l00058	SAMPLE	214982-006	Filtrate	155082	09/22/09 21:12	5.0	2	
059	09i22l00059	MSS	214982-007	Filtrate	155082	09/22/09 21:22	5.0	2	
060	09i22l00060	SAMPLE	214982-008	Filtrate	155082	09/22/09 21:33	5.0	2	
061	09i22l00061	TUN				09/22/09 21:44	1.0	1	
062	09i22l00062	X	RINSE			09/22/09 21:51	1.0	2	
063	09i22l00063	SAMPLE	214982-009	Filtrate	155082	09/22/09 22:01	5.0	2	
064	09i22l00064	CCV				09/22/09 22:12	1.0	12 2	
065	09i22l00065	X				09/22/09 22:22	1.0	2	
066	09i22l00066	CCB				09/22/09 22:32	1.0	2	
067	09i22l00067	ICSA				09/22/09 22:43	1.0	10 2	7:CA=290000
068	09i22l00068	ICSAB				09/22/09 22:53	1.0	11 2	11:CA=280000
069	09i22l00069	X	RINSE			09/22/09 23:03	1.0	2	
070	09i22l00070	X	RINSE			09/22/09 23:14	1.0	2	
071	09i22l00071	X	RINSE			09/22/09 23:24	1.0	2	
072	09i22l00072	X	RINSE			09/22/09 23:34	1.0	2	
073	09i22l00073	X	RINSE			09/22/09 23:45	1.0	2	

JYF 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 68.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 69382287

Date : 09/22/09 Reference : 09i22l00003
Sequence : MET06 09i22l00 Analyzed : 09/22/09 11:45

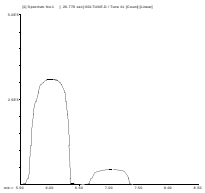
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	3421307	2109018	22341	632070	139223	13309	3575408	4485641	3188793	6094388
		LOWER LIMIT	1026392	632705	6702	189621	41767	3993	1072622	1345692	956638	1828316
		UPPER LIMIT	4105568	2530822	26809	758484	167068	15971	4290490	5382769	3826552	7313266
011	ICB		3267843	1939408	23299	636188	151745	15320	3400078	4380134	2975513	5877327
012	ICSA		1348211	1031887	13154	379755	110869	11162	1917432	2402978	1703563	3660023
014	ICSAB		1034049	851438	10689	297972	81005	7969	1950802	2547057	1655792	3872338
017	BLANK	QC512570	1167077	1081878	12679	341977	97507	10265	3185450	4953254	2488132	6275307
018	BS	QC512571	1188091	1068450	13165	355124	100815	10807	3069941	4666219	2398394	6065603
019	BSD	QC512572	1206586	1094220	13928	366559	103386	11156	3111879	4721331	2478704	6179790
020	MSS	214809-001	1206404	1126397	13411	362560	102252	10934	3184534	4877799	2539458	6326226
021	SER	QC512575	1188824	1074819	13035	360841	102725	10631	3099981	4773916	2406475	6126754
022	MS	QC512573	1213233	1108661	13568	372115	102659	10925	3093848	4628064	2466708	6205761
023	MSD	QC512574	1248396	1122403	13989	375489	103180	10974	3079765	4635594	2489884	6182940
024	CCV		1293454	1130378	14674	382273	103231	11209	2931305	4263699	2406324	5877503
026	CCB		1437528	1215099	15513	408128	110983	11958	3157637	4709667	2551710	6139353
027	PDS	QC512576	1388073	1204918	15456	401901	106017	11421	2998203	4263204	2478203	5952872
028	MSS	214809-002	1448190	1233275	15882	415657	110796	12194	3195610	4715381	2569847	6206265
029	CCV		1446239	1229031	15830	409225	105879	11726	3001814	4233239	2515076	5934042
031	CCB		1542778	1276082	16434	425075	112475	12364	3216376	4664083	2608389	6116758
032	MS	QC512577	1441710	1207080	15915	418904	109946	11905	3022723	4313202	2468456	5940973
033	MSD	QC512578	1533064	1289726	16446	422553	110744	12183	3175353	4463416	2621134	6103215
034	SAMPLE	214940-002	1466076	1241137	16601	434013	113391	12520	3075515	4304707	2531707	5937527
035	SAMPLE	214940-003	1574773	1293157	17195	434526	115446	12734	3249303	4674100	2638781	6222725
036	SAMPLE	214940-004	1501361	1232802	16612	431332	113489	12515	3082707	4400745	2508734	5996077
037	CCV		1476221	1215166	15642	416766	106859	11568	2924361	4076676	2462418	5734481
039	CCB		1648161	1322985	17705	444201	116025	13015	3178811	4533980	2618345	5969703
040	BLANK	QC512570	1728651	1407906	17808	438200	115124	13063	3302093	4633926	2725158	6205269
041	BS	QC512571	1782303	1418838	18010	445566	114891	13043	3280558	4552541	2767196	6296812
042	BSD	QC512572	1700615	1355841	18065	442997	114210	13044	3134332	4340205	2610907	5913839
043	MSS	214809-001	1641764	1298093	17135	428457	111667	12609	3106553	4395666	2568546	5895294
044	SER	QC512575	1658321	1314394	17471	440210	115734	12878	3185360	4561193	2614322	6063810
045	MS	QC512573	1621698	1294972	16837	435915	111655	12415	3068649	4369307	2550512	5939743
046	MSD	QC512574	1631457	1305349	17606	432814	111239	12917	3076689	4368314	2570919	5956421
047	PDS	QC512576	1579365	1248698	16668	431569	109717	12102	2906089	4040859	2455711	5649258
048	MSS	214809-002	1701160	1313984	16940	428849	112120	12467	3169498	4553820	2596357	6063266
049	BLANK	QC512723	1602563	1262951	17266	414834	110413	12780	3112042	4470251	2547373	5911657
050	CCV		1575364	1254876	17071	429612	109042	12489	2942588	4046735	2468048	5710896
052	CCB		1698733	1341832	17797	452488	116696	13174	3180172	4511722	2640790	6041386
053	SAMPLE	214982-001	1643184	1335857	17684	433929	113726	13105	3200477	4580881	2627158	6088332
054	SAMPLE	214982-002	1625590	1299742	17291	429848	113423	12983	3172021	4534841	2589262	5974556
055	SAMPLE	214982-003	1605885	1275238	17321	426930	111803	12957	3140872	4466719	2565350	5926295
056	SAMPLE	214982-004	1664802	1332253	17438	428155	112309	12899	3239104	4528897	2657057	6009351
057	SAMPLE	214982-005	1586682	1289535	17514	430819	114218	13223	3188646	4521156	2597451	5942041
058	SAMPLE	214982-006	1640698	1345473	17988	417867	111445	13489	3252668	4637640	2672351	6081034
059	MSS	214982-007	1611481	1302878	17480	423157	111061	13006	3195246	4556938	2612239	6070720
060	SAMPLE	214982-008	1552430	1245368	16930	410707	108873	12612	3087262	4440454	2517256	5890742
063	SAMPLE	214982-009	1512281	1241608	16826	406718	108515	12185	3090077	4494515	2534119	5882538
064	CCV		1452902	1164175	16019	403605	104079	11809	2805991	3960138	2349292	5478008
066	CCB		1500440	1226555	16390	397308	106766	12471	3048766	4525392	2518317	5916733
067	ICSA		610990 *	584604 *	9310	245229	67926	7645	1755008	2507769	1407715	3673533
068	ICSAB		628341 *	633641	8790	222626	64987	7550	1871466	2647279	1531344	3921011

MET06 QC Tune Report

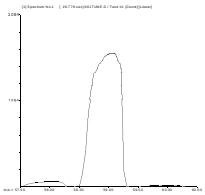
Data File: C:\ICPCHEM\1\DATA\09I22l00.B\001TUNE.D
Date Acquired: Sep 22 2009 11:27 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

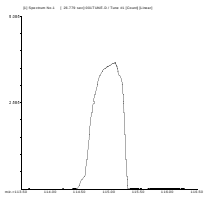
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	256114	255805	256187	253232	0.70	5.00	
59 Co	87017	86413	86258	85901	0.91	5.00	
115 In	2010845	1977966	1981791	1991020	0.69	5.00	
205 Tl	179237	178484	177958	176585	0.92	5.00	



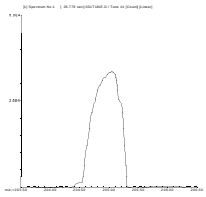
7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



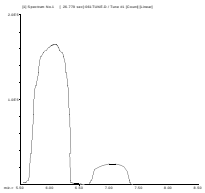
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET06 QC Tune Report

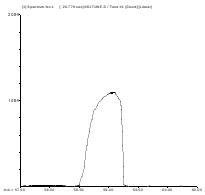
Data File: C:\ICPCHEM\1\DATA\09I22l00.B\061TUNE.D
Date Acquired: Sep 22 2009 09:44 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

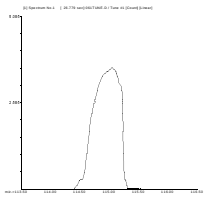
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	131073	130432	128940	130646	0.19	5.00	
59 Co	59988	58978	59293	58733	1.13	5.00	
115 In	1866828	1823855	1811702	1812972	0.72	5.00	
205 Tl	179583	177603	178875	178444	0.88	5.00	



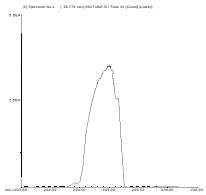
7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 METALS Water: EPA 6020

Inst : MET06 Reviewer : ---
Calnum : 69382287001 Date : 22-SEP-2009 11:45
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i22l00004	69382287004		22-SEP-2009 11:55	S12854, S12847
L2	09i22l00005	69382287005		22-SEP-2009 12:05	S12855, S12847
L3	09i22l00006	69382287006		22-SEP-2009 12:17	S12856, S12847
L4	09i22l00007	69382287007		22-SEP-2009 12:27	S12857, S12847
L5	09i22l00008	69382287008		22-SEP-2009 12:37	S12852, S12847
L6	09i22l00009	69382287009		22-SEP-2009 12:48	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0462	0.0078	0.0073	0.0072	0.0067	0.0066	BLNK	-18.836	150.520		0.0136	1.000	0.995	
Antimony	A	0.0060	0.0026	0.0026	0.0027	0.0026	0.0027	BLNK	-0.0362	379.309		0.0032	1.000	0.995	
Barium	A	0.0012	7.2E-4	6.5E-4	6.3E-4	5.7E-4	5.7E-4	BLNK	-0.0650	1746.93		7.2E-4	1.000	0.995	
Beryllium	A	0.0028	0.0025	0.0025	0.0026	0.0024	0.0025	BLNK	-0.0341	401.484		0.0026	1.000	0.995	
Cadmium	A	0.0010	8.2E-4	8.2E-4	8.8E-4	8.1E-4	8.1E-4	BLNK	-0.0513	1240.57		8.6E-4	1.000	0.995	
Calcium	A	6.2E-4	2.9E-4	2.4E-4	2.2E-4	2.0E-4	2.0E-4	BLNK	-52.806	5043.60		3.0E-4	1.000	0.995	
Lead	A	0.0116	0.0082	0.0080	0.0082	0.0076	0.0075	BLNK	-0.0667	132.922		0.0085	1.000	0.995	
Magnesium	A	0.0086	0.0065	0.0061	0.0062	0.0058	0.0057	BLNK	-21.538	175.079		0.0065	1.000	0.995	
Potassium	A	0.0722	0.0199	0.0131	0.0074	0.0062	0.0062	BLNK	-122.77	162.821		0.0208	1.000	0.995	
Silver	A	0.0047	0.0035	0.0036	0.0037	0.0034	0.0034	BLNK	-0.0346	294.101		0.0037	1.000	0.995	
Thallium	A	0.0103	0.0078	0.0077	0.0080	0.0078	0.0079	BLNK	-0.0394	126.793		0.0083	1.000	0.995	
Arsenic	E	0.0079	0.0054	0.0059	0.0053	0.0054	0.0052	BLNK	-0.0507	190.314		0.0058	1.000	0.995	
Chromium	E	0.1422	0.0559	0.0510	0.0436	0.0419	0.0420	BLNK	-0.1550	23.8555		0.0628	1.000	0.995	
Manganese	E	0.0393	0.0213	0.0199	0.0182	0.0176	0.0175	BLNK	-0.2297	57.1521		0.0223	1.000	0.995	
Nickel	E	0.0325	0.0258	0.0231	0.0221	0.0209	0.0206	BLNK	-0.0857	48.4347		0.0242	1.000	0.995	
Sodium	E	0.0402	0.0154	0.0118	0.0092	0.0088	0.0087	BLNK	-128.33	115.928		0.0157	1.000	0.995	
Zinc	E	0.2350	0.0708	0.0387	0.0155	0.0135	0.0125	BLNK	-0.3743	78.6725		0.0643	0.998	0.995	
Iron	H	0.0140	0.0093	0.0096	0.0084	0.0081	0.0081	BLNK	-41.946	124.013		0.0096	1.000	0.995	
Selenium	H	0.0016	0.0014	0.0016	0.0014	0.0014	0.0013	BLNK	-0.0553	737.353		0.0015	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	407	50.00	-21	100.0	-9	1000	7	10000	1	20000	0
Antimony	A	0.100	93	0.500	-9	1.000	-5	10.00	3	100.0	-3	200.0	1
Barium	A	0.100	39	0.500	13	1.000	6	10.00	9	100.0	-1	200.0	0
Beryllium	A	0.100	-21	0.500	-5	1.000	-3	10.00	4	100.0	-2	200.0	0
Cadmium	A	0.100	-24	0.500	-8	1.000	-3	10.00	8	100.0	0	200.0	0
Calcium	A	10.00	-314	50.00	-60	100.0	-32	1000	6	10000	1	20000	0
Lead	A	0.100	-12	0.500	-5	1.000	0	10.00	9	100.0	1	200.0	0
Magnesium	A	10.00	-165	50.00	-29	100.0	-15	1000	7	10000	1	20000	0
Potassium	A	10.00	-152	50.00	-21	100.0	-10	1000	9	10000	0	20000	0
Silver	A	0.100	2	0.500	-3	1.000	4	10.00	9	100.0	1	200.0	0
Thallium	A	0.050	-49	0.250	-16	0.500	-10	5.000	0	50.00	-1	100.0	0
Arsenic	E	0.100	0	0.500	-7	1.000	6	10.00	-1	100.0	2	200.0	-1
Chromium	E	0.100	84	0.500	2	1.000	6	10.00	2	100.0	0	200.0	0
Manganese	E	0.100	-105	0.500	-24	1.000	-9	10.00	2	100.0	0	200.0	0
Nickel	E	0.100	-28	0.500	8	1.000	3	10.00	6	100.0	1	200.0	0
Sodium	E	10.00	-917	50.00	-178	100.0	-92	1000	-6	10000	0	20000	0
Zinc	E	0.100	1375	0.500	382	1.000	167	10.00	18	100.0	6	200.0	-1
Iron	H	10.00	-346	50.00	-69	100.0	-24	1000	0	10000	0	20000	0
Selenium	H	0.100	-36	0.500	-5	1.000	13	10.00	2	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 METALS Water
EPA 6020

Inst : MET06
Calnum : 69382287001 Cal Date : 22-SEP-2009

ICV 69382287010 (09i22l00010 22-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10190	ug/L	2	10	
Antimony	A	100.0	97.94	ug/L	-2	10	
Barium	A	100.0	100.1	ug/L	0	10	
Beryllium	A	100.0	100.4	ug/L	0	10	
Cadmium	A	100.0	99.99	ug/L	0	10	
Calcium	A	10000	9912	ug/L	-1	10	
Lead	A	100.0	99.87	ug/L	0	10	
Magnesium	A	10000	9967	ug/L	0	10	
Potassium	A	10000	10150	ug/L	2	10	
Silver	A	100.0	105.8	ug/L	6	10	
Thallium	A	50.00	49.57	ug/L	-1	10	
Arsenic	E	100.0	97.09	ug/L	-3	10	
Chromium	E	100.0	100.6	ug/L	1	10	
Manganese	E	100.0	98.48	ug/L	-2	10	
Nickel	E	100.0	101.0	ug/L	1	10	
Sodium	E	10000	9963	ug/L	0	10	
Zinc	E	100.0	97.38	ug/L	-3	10	
Iron	H	10000	9997	ug/L	0	10	
Selenium	H	100.0	98.23	ug/L	-2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287011 File : 09i22l00011 Time : 22-SEP-2009 13:08
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Potassium	A	ND	10.00	5.476	ug/L	
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	3267843	-4.49
Scandium	A	2109018	1939408	-8.04
Scandium	E	22341	23299	4.29
Scandium	H	632070	636188	0.65
Germanium	H	139223	151745	8.99
Germanium	E	13309	15320	15.11
Indium	A	3575408	3400078	-4.90
Bismuth	A	4485641	4380134	-2.35
Yttrium	A	3188793	2975513	-6.69
Terbium	A	6094388	5877327	-3.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287012 File : 09i22l00012 Time : 22-SEP-2009 13:19
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2184	0.1000	ug/L	!a+
Barium	A	1.027	0.1000	ug/L	!a+
Beryllium	A	[-0.006000]	0.1000	ug/L	
Cadmium	A	1.978	0.1000	ug/L	!a+
Lead	A	1.190	0.1000	ug/L	!a+
Silver	A	0.1254	0.1000	ug/L	!a+
Thallium	A	0.06070	0.05000	ug/L	!a+
Arsenic	E	0.1387	0.1000	ug/L	!a+
Chromium	E	1.122	0.1000	ug/L	!a+
Manganese	E	6.211	0.1000	ug/L	!a+
Nickel	E	3.559	0.1000	ug/L	!a+
Zinc	E	4.151	0.1000	ug/L	!a+
Selenium	H	[0.09100]	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93410	ug/L	93
Calcium	A	300000	284100	ug/L	95
Magnesium	A	100000	90170	ug/L	90
Molybdenum	A	2000	1989	ug/L	99
Potassium	A	100000	95140	ug/L	95
Sodium	E	250000	239100	ug/L	96
Iron	H	250000	246200	ug/L	98

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1348211	-60.59
Scandium	A	2109018	1031887	-51.07
Scandium	E	22341	13154	-41.12
Scandium	H	632070	379755	-39.92
Germanium	H	139223	110869	-20.37
Germanium	E	13309	11162	-16.13
Indium	A	3575408	1917432	-46.37
Bismuth	A	4485641	2402978	-46.43
Yttrium	A	3188793	1703563	-46.58
Terbium	A	6094388	3660023	-39.94

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287014 File : 09i22l00014 Time : 22-SEP-2009 13:39
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	89100	ug/L	-11		
Cadmium	A	100.0	90.09	ug/L	-10	20	
Calcium	A	300000	286700	ug/L	-4		
Magnesium	A	100000	85600	ug/L	-14		
Potassium	A	100000	94240	ug/L	-6		
Silver	A	50.00	42.18	ug/L	-16	20	
Arsenic	E	100.0	86.55	ug/L	-13	20	
Chromium	E	200.0	204.6	ug/L	2	20	
Manganese	E	200.0	210.6	ug/L	5	20	
Nickel	E	200.0	193.2	ug/L	-3	20	
Sodium	E	250000	215000	ug/L	-14		
Zinc	E	100.0	76.50	ug/L	**-23**	20	ab- ***
Iron	H	250000	250300	ug/L	0		
Selenium	H	100.0	82.63	ug/L	-17	20	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	632070	297972	-52.86
Scandium	A	2109018	851438	-59.63
Scandium	E	22341	10689	-52.16
Germanium	H	139223	81005	-41.82
Germanium	E	13309	7969	-40.12
Indium	A	3575408	1950802	-45.44
Yttrium	A	3188793	1655792	-48.07

-=low bias ab=ICSAB

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287037 File : 09i22l00037 Time : 22-SEP-2009 17:34
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0136	0.0060	10000	8969	ug/L	-10	10	
Antimony	A	0.0032	0.0027	100.0	100.7	ug/L	1	10	
Barium	A	7.2E-4	5.4E-4	100.0	94.30	ug/L	-6	10	
Beryllium	A	0.0026	0.0027	100.0	108.0	ug/L	8	10	
Cadmium	A	8.6E-4	8.0E-4	100.0	98.75	ug/L	-1	10	
Calcium	A	3.0E-4	1.9E-4	10000	9664	ug/L	-3	10	
Lead	A	0.0085	0.0076	100.0	100.5	ug/L	1	10	
Magnesium	A	0.0065	0.0050	10000	8738	ug/L	**-13**	10	c- ***
Potassium	A	0.0208	0.0059	10000	9515	ug/L	-5	10	
Silver	A	0.0037	0.0034	100.0	100.0	ug/L	0	10	
Thallium	A	0.0083	0.0078	50.00	49.70	ug/L	-1	10	
Arsenic	E	0.0058	0.0053	100.0	99.97	ug/L	0	10	
Chromium	E	0.0628	0.0434	100.0	103.5	ug/L	4	10	
Manganese	E	0.0223	0.0189	100.0	107.5	ug/L	8	10	
Nickel	E	0.0242	0.0220	100.0	106.4	ug/L	6	10	
Sodium	E	0.0157	0.0075	10000	8588	ug/L	**-14**	10	c- ***
Zinc	E	0.0643	0.0122	100.0	95.37	ug/L	-5	10	
Iron	H	0.0096	0.0085	10000	10480	ug/L	5	10	
Selenium	H	0.0015	0.0014	100.0	101.2	ug/L	1	10	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1476221	-56.85
Scandium	A	2109018	1215166	-42.38
Scandium	E	22341	15642	-29.99
Scandium	H	632070	416766	-34.06
Germanium	H	139223	106859	-23.25
Germanium	E	13309	11568	-13.08
Indium	A	3575408	2924361	-18.21
Bismuth	A	4485641	4076676	-9.12
Yttrium	A	3188793	2462418	-22.78
Terbium	A	6094388	5734481	-5.91

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287039 File : 09i22l00039 Time : 22-SEP-2009 17:55
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Potassium	A	[5.880]	10.00	5.476	ug/L	!ib
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1648161	-51.83
Scandium	A	2109018	1322985	-37.27
Scandium	E	22341	17705	-20.75
Scandium	H	632070	444201	-29.72
Germanium	H	139223	116025	-16.66
Germanium	E	13309	13015	-2.21
Indium	A	3575408	3178811	-11.09
Bismuth	A	4485641	4533980	1.08
Yttrium	A	3188793	2618345	-17.89
Terbium	A	6094388	5969703	-2.05

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287050 File : 09i22l00050 Time : 22-SEP-2009 19:49
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0136	0.0061	10000	9117	ug/L	-9	10	
Antimony	A	0.0032	0.0027	100.0	101.1	ug/L	1	10	
Barium	A	7.2E-4	5.5E-4	100.0	96.06	ug/L	-4	10	
Beryllium	A	0.0026	0.0027	100.0	107.1	ug/L	7	10	
Cadmium	A	8.6E-4	8.0E-4	100.0	99.80	ug/L	0	10	
Calcium	A	3.0E-4	2.0E-4	10000	9784	ug/L	-2	10	
Lead	A	0.0085	0.0076	100.0	100.9	ug/L	1	10	
Magnesium	A	0.0065	0.0051	10000	8864	ug/L	**-11**	10	c- ***
Potassium	A	0.0208	0.0060	10000	9569	ug/L	-4	10	
Silver	A	0.0037	0.0034	100.0	101.1	ug/L	1	10	
Thallium	A	0.0083	0.0079	50.00	49.78	ug/L	0	10	
Arsenic	E	0.0058	0.0052	100.0	98.63	ug/L	-1	10	
Chromium	E	0.0628	0.0420	100.0	100.0	ug/L	0	10	
Manganese	E	0.0223	0.0183	100.0	104.5	ug/L	5	10	
Nickel	E	0.0242	0.0212	100.0	102.8	ug/L	3	10	
Sodium	E	0.0157	0.0074	10000	8398	ug/L	**-16**	10	c- ***
Zinc	E	0.0643	0.0119	100.0	93.26	ug/L	-7	10	
Iron	H	0.0096	0.0085	10000	10480	ug/L	5	10	
Selenium	H	0.0015	0.0014	100.0	101.6	ug/L	2	10	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1575364	-53.95
Scandium	A	2109018	1254876	-40.50
Scandium	E	22341	17071	-23.59
Scandium	H	632070	429612	-32.03
Germanium	H	139223	109042	-21.68
Germanium	E	13309	12489	-6.16
Indium	A	3575408	2942588	-17.70
Bismuth	A	4485641	4046735	-9.78
Yttrium	A	3188793	2468048	-22.60
Terbium	A	6094388	5710896	-6.29

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287052 File : 09i22l00052 Time : 22-SEP-2009 20:10
Cal : 69382287001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	5.832	ug/L	
Antimony	A	ND	0.1000	0.05957	ug/L	
Barium	A	ND	0.1000	0.07438	ug/L	
Beryllium	A	ND	0.1000	0.04572	ug/L	
Cadmium	A	ND	0.1000	0.06044	ug/L	
Calcium	A	ND	10.00	6.501	ug/L	
Lead	A	ND	0.1000	0.05505	ug/L	
Magnesium	A	ND	10.00	6.392	ug/L	
Potassium	A	ND	10.00	5.476	ug/L	
Silver	A	ND	0.1000	0.06124	ug/L	
Thallium	A	ND	0.05000	0.03841	ug/L	
Arsenic	E	ND	0.1000	0.06416	ug/L	
Chromium	E	ND	0.1000	0.03166	ug/L	
Manganese	E	ND	0.1000	0.06246	ug/L	
Nickel	E	ND	0.1000	0.08200	ug/L	
Sodium	E	ND	10.00	7.876	ug/L	
Zinc	E	ND	0.1000	0.3547	ug/L	
Iron	H	ND	10.00	6.235	ug/L	
Selenium	H	ND	0.1000	0.06222	ug/L	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	1698733	-50.35
Scandium	A	2109018	1341832	-36.38
Scandium	E	22341	17797	-20.34
Scandium	H	632070	452488	-28.41
Germanium	H	139223	116696	-16.18
Germanium	E	13309	13174	-1.01
Indium	A	3575408	3180172	-11.05
Bismuth	A	4485641	4511722	0.58
Yttrium	A	3188793	2640790	-17.19
Terbium	A	6094388	6041386	-0.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287067 File : 09i22l00067 Time : 22-SEP-2009 22:43
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2268	0.1000	ug/L	!a+
Barium	A	0.9592	0.1000	ug/L	!a+
Beryllium	A	[-0.01290]	0.1000	ug/L	i- ***
Cadmium	A	1.670	0.1000	ug/L	!a+
Lead	A	1.210	0.1000	ug/L	!a+
Silver	A	0.1177	0.1000	ug/L	!a+
Thallium	A	[0.04520]	0.05000	ug/L	!a+
Arsenic	E	0.2929	0.1000	ug/L	!a+
Chromium	E	1.158	0.1000	ug/L	!a+
Manganese	E	6.679	0.1000	ug/L	!a+
Nickel	E	3.893	0.1000	ug/L	!a+
Zinc	E	5.060	0.1000	ug/L	!a+
Selenium	H	0.1739	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	84020	ug/L	84
Calcium	A	300000	285800	ug/L	95
Magnesium	A	100000	80190	ug/L	80
Molybdenum	A	2000	2009	ug/L	100
Potassium	A	100000	92500	ug/L	93
Sodium	E	250000	185400	ug/L	74
Iron	H	250000	267100	ug/L	107

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	3421307	610990	**-82.14 ***
Scandium	A	2109018	584604	**-72.28 ***
Scandium	E	22341	9310	-58.33
Scandium	H	632070	245229	-61.20
Germanium	H	139223	67926	-51.21
Germanium	E	13309	7645	-42.56
Indium	A	3575408	1755008	-50.91
Bismuth	A	4485641	2507769	-44.09
Yttrium	A	3188793	1407715	-55.85
Terbium	A	6094388	3673533	-39.72

!=warning +=high bias -=low bias a=ICSA i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214924 METALS Water
EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 69382287068 File : 09i22l00068 Time : 22-SEP-2009 22:53
Cal : 69382287001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	80910	ug/L	-19		
Cadmium	A	100.0	87.95	ug/L	-12	20	
Calcium	A	300000	280700	ug/L	-6		
Magnesium	A	100000	77080	ug/L	-23		
Potassium	A	100000	90560	ug/L	-9		
Silver	A	50.00	40.99	ug/L	-18	20	
Arsenic	E	100.0	87.46	ug/L	-13	20	
Chromium	E	200.0	207.8	ug/L	4	20	
Manganese	E	200.0	220.0	ug/L	10	20	
Nickel	E	200.0	199.8	ug/L	0	20	
Sodium	E	250000	179300	ug/L	-28		
Zinc	E	100.0	74.08	ug/L	**-26**	20	ab- ***
Iron	H	250000	263600	ug/L	5		
Selenium	H	100.0	89.06	ug/L	-11	20	

ISTD (ICALBLK 09i22l00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	632070	222626	-64.78
Scandium	A	2109018	633641	-69.96
Scandium	E	22341	8790	-60.66
Germanium	H	139223	64987	-53.32
Germanium	E	13309	7550	-43.27
Indium	A	3575408	1871466	-47.66
Yttrium	A	3188793	1531344	-51.98

-=low bias ab=ICSAB

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i22m00001	TUN				09/22/09 12:04	1.0	1	
002	09i22m00002	X	RINSE			09/22/09 12:10	1.0	2	
003	09i22m00003	ICALBLK	CALBLANK			09/22/09 12:21	1.0	2	
004	09i22m00004	ICAL				09/22/09 12:31	1.0	3 2	
005	09i22m00005	ICAL				09/22/09 12:41	1.0	4 2	
006	09i22m00006	ICAL				09/22/09 12:51	1.0	5 2	
007	09i22m00007	ICAL				09/22/09 13:01	1.0	6 2	
008	09i22m00008	ICAL				09/22/09 13:11	1.0	7 2	
009	09i22m00009	ICAL				09/22/09 13:21	1.0	8 2	
010	09i22m00010	ICV				09/22/09 13:31	1.0	9 2	
011	09i22m00011	ICB				09/22/09 13:41	1.0	2	
012	09i22m00012	X				09/22/09 13:51	1.0	2	
013	09i22m00013	ICSA				09/22/09 14:08	1.0	10 2	6:CA=320000
014	09i22m00014	ICSAB				09/22/09 14:18	1.0	11 2	10:CA=320000
015	09i22m00015	X	RINSE			09/22/09 14:29	1.0	2	
016	09i22m00016	X	RINSE			09/22/09 14:39	1.0	2	
017	09i22m00017	SAMPLE	214901-008	Water	154979	09/22/09 14:49	10.0	2	
018	09i22m00018	SAMPLE	214901-009	Water	154979	09/22/09 14:59	5.0	2	
019	09i22m00019	SAMPLE	214901-010	Water	154979	09/22/09 15:09	10.0	2	
020	09i22m00020	SAMPLE	214940-002	Water	155040	09/22/09 15:19	50.0	2	
021	09i22m00021	X				09/22/09 15:30	1.0	12 2	
022	09i22m00022	CCV				09/22/09 15:40	1.0	12 2	
023	09i22m00023	CCB				09/22/09 15:49	1.0	2	
024	09i22m00024	ICSA				09/22/09 16:00	1.0	10 2	7:CA=310000
025	09i22m00025	ICSAB				09/22/09 16:10	1.0	11 2	10:CA=320000
026	09i22m00026	X	RINSE			09/22/09 16:18	1.0	2	
027	09i22m00027	X	RINSE			09/22/09 16:28	1.0	2	
028	09i22m00028	X	RINSE			09/22/09 16:38	1.0	2	
029	09i22m00029	BLANK	QC513001	Water	155149	09/22/09 16:48	5.0	2	
030	09i22m00030	BS	QC513002	Water	155149	09/22/09 16:58	5.0	2	
031	09i22m00031	BSD	QC513003	Water	155149	09/22/09 17:08	5.0	2	
032	09i22m00032	MSS	214922-005	Water	155149	09/22/09 17:18	5.0	2	1:NA=50000
033	09i22m00033	SER	QC513006	Water	155149	09/22/09 17:29	25.0	2	
034	09i22m00034	MS	QC513004	Water	155149	09/22/09 17:39	5.0	2	
035	09i22m00035	MSD	QC513005	Water	155149	09/22/09 17:49	5.0	2	
036	09i22m00036	PDS	QC513007	Water	155149	09/22/09 17:59	5.0	13 14 2	
037	09i22m00037	CCV				09/22/09 18:09	1.0	12 2	
038	09i22m00038	CCB				09/22/09 18:19	1.0	2	
039	09i22m00039	CCB				09/22/09 18:29	1.0	2	
040	09i22m00040	SAMPLE	214922-006	Water	155149	09/22/09 18:39	5.0	2	1:NA=46000
041	09i22m00041	SAMPLE	215020-001	Filtrate	155149	09/22/09 18:49	5.0	2	3:CA=46000
042	09i22m00042	CCV				09/22/09 18:59	1.0	12 2	
043	09i22m00043	CCB				09/22/09 19:09	1.0	2	
044	09i22m00044	MSS	214922-005	Water	155149	09/22/09 19:19	50.0	2	
045	09i22m00045	SER	QC513006	Water	155149	09/22/09 19:30	250.0	2	
046	09i22m00046	PDS	QC513007	Water	155149	09/22/09 19:40	50.0	13 14 2	
047	09i22m00047	SAMPLE	214922-006	Water	155149	09/22/09 19:50	50.0	2	
048	09i22m00048	SAMPLE	214809-004	Water	155040	09/22/09 20:00	5.0	2	
049	09i22m00049	SAMPLE	214865-001	Water	155040	09/22/09 20:10	5.0	2	
050	09i22m00050	CCV				09/22/09 20:20	1.0	12 2	
051	09i22m00051	CCB				09/22/09 20:30	1.0	2	
052	09i22m00052	ICSA				09/22/09 20:40	1.0	10 2	7:CA=320000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i22m00053	ICSAB				09/22/09 20:51	1.0	11 2	9:CA=320000
054	09i22m00054	X	RINSE			09/22/09 21:01	1.0	2	
055	09i22m00055	X	RINSE			09/22/09 21:11	1.0	2	
056	09i22m00056	BLANK	QC512579	Filtrate	155041	09/22/09 21:22	5.0	2	
057	09i22m00057	BS	QC512580	Filtrate	155041	09/22/09 21:32	5.0	2	
058	09i22m00058	BSD	QC512581	Filtrate	155041	09/22/09 21:42	5.0	2	
059	09i22m00059	MSS	214920-002	Filtrate	155041	09/22/09 21:52	5.0	2	1:NA=99000
060	09i22m00060	SER	QC512584	Filtrate	155041	09/22/09 22:02	25.0	2	
061	09i22m00061	TUN				09/22/09 22:13	1.0	1	
062	09i22m00062	X	RINSE			09/22/09 22:20	1.0	2	
063	09i22m00063	MS	QC512582	Filtrate	155041	09/22/09 22:30	5.0	2	
064	09i22m00064	MSD	QC512583	Filtrate	155041	09/22/09 22:40	5.0	2	
065	09i22m00065	PDS	QC512585	Filtrate	155041	09/22/09 22:50	5.0	13 14 2	
066	09i22m00066	CCV				09/22/09 23:00	1.0	12 2	
067	09i22m00067	CCV				09/22/09 23:10	1.0	12 2	
068	09i22m00068	CCB				09/22/09 23:20	1.0	2	
069	09i22m00069	CCB				09/22/09 23:30	1.0	2	
070	09i22m00070	MSS	214955-003	Filtrate	155041	09/22/09 23:40	5.0	2	1:NA=100000
071	09i22m00071	MS	QC512586	Filtrate	155041	09/22/09 23:50	5.0	2	
072	09i22m00072	MSD	QC512587	Filtrate	155041	09/23/09 00:00	5.0	2	
073	09i22m00073	SAMPLE	214811-003	Filtrate	155041	09/23/09 00:10	50.0	2	
074	09i22m00074	SAMPLE	214811-004	Filtrate	155041	09/23/09 00:21	50.0	2	
075	09i22m00075	SAMPLE	214811-003	Filtrate	155041	09/23/09 00:31	5.0	2	3:NA=51000
076	09i22m00076	CCV				09/23/09 00:41	1.0	12 2	
077	09i22m00077	CCB				09/23/09 00:51	1.0	2	
078	09i22m00078	BLANK	QC512540	Soil	155034	09/23/09 01:01	25.0	2	
079	09i22m00079	BS	QC512541	Soil	155034	09/23/09 01:11	25.0	2	
080	09i22m00080	BSD	QC512542	Soil	155034	09/23/09 01:21	25.0	2	
081	09i22m00081	MSS	214910-004	Soil	155034	09/23/09 01:31	50.0	2	
082	09i22m00082	MS	QC512543	Soil	155034	09/23/09 01:41	50.0	2	
083	09i22m00083	MSD	QC512544	Soil	155034	09/23/09 01:51	50.0	2	
084	09i22m00084	SAMPLE	214910-005	Soil	155034	09/23/09 02:01	50.0	2	
085	09i22m00085	SAMPLE	214910-006	Soil	155034	09/23/09 02:12	50.0	2	
086	09i22m00086	SAMPLE	214912-001	Soil	155034	09/23/09 02:22	50.0	2	
087	09i22m00087	SAMPLE	214912-002	Soil	155034	09/23/09 02:32	50.0	2	
088	09i22m00088	CCV				09/23/09 02:42	1.0	12 2	
089	09i22m00089	CCB				09/23/09 02:52	1.0	2	
090	09i22m00090	CCB				09/23/09 03:02	1.0	2	
091	09i22m00091	SAMPLE	214912-003	Soil	155034	09/23/09 03:12	50.0	2	
092	09i22m00092	CCV				09/23/09 03:22	1.0	12 2	
093	09i22m00093	CCB				09/23/09 03:32	1.0	2	
094	09i22m00094	ICSA				09/23/09 03:42	1.0	10 2	7:CA=310000
095	09i22m00095	ICSAB				09/23/09 03:53	1.0	11 2	10:CA=320000
096	09i22m00096	X	RINSE			09/23/09 04:03	1.0	2	
097	09i22m00097	X	RINSE			09/23/09 04:13	1.0	2	
098	09i22m00098	SAMPLE	214922-003	Water	155040	09/23/09 04:23	50.0	2	
099	09i22m00099	SAMPLE	214922-004	Water	155040	09/23/09 04:34	50.0	2	
100	09i22m00100	SAMPLE	214924-002	Water	155040	09/23/09 04:44	50.0	2	
101	09i22m00101	SAMPLE	214924-003	Water	155040	09/23/09 04:54	50.0	2	
102	09i22m00102	SAMPLE	214924-004	Water	155040	09/23/09 05:04	50.0	2	
103	09i22m00103	SAMPLE	214924-005	Water	155040	09/23/09 05:14	50.0	2	
104	09i22m00104	SAMPLE	214924-006	Water	155040	09/23/09 05:24	50.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09i22m00105	SAMPLE	214924-007	Water	155040	09/23/09 05:34	50.0	2	
106	09i22m00106	CCV				09/23/09 05:45	1.0	12 2	
107	09i22m00107	CCB				09/23/09 05:55	1.0	2	
108	09i22m00108	CCB				09/23/09 06:05	1.0	2	
109	09i22m00109	SAMPLE	214924-009	Water	155040	09/23/09 06:15	50.0	2	
110	09i22m00110	CCV				09/23/09 06:25	1.0	12 2	
111	09i22m00111	CCB				09/23/09 06:35	1.0	2	
112	09i22m00112	SAMPLE	214922-003	Water	155040	09/23/09 06:45	5.0	2	1:NA=39000
113	09i22m00113	SAMPLE	214922-004	Water	155040	09/23/09 06:55	5.0	2	2:NA=52000
114	09i22m00114	SAMPLE	214924-002	Water	155040	09/23/09 07:05	5.0	2	1:NA=33000
115	09i22m00115	SAMPLE	214924-003	Water	155040	09/23/09 07:16	5.0	2	1:NA=47000
116	09i22m00116	SAMPLE	214924-004	Water	155040	09/23/09 07:26	5.0	2	1:NA=47000
117	09i22m00117	SAMPLE	214924-005	Water	155040	09/23/09 07:36	5.0	2	1:NA=53000
118	09i22m00118	SAMPLE	214924-006	Water	155040	09/23/09 07:46	5.0	2	1:NA=51000
119	09i22m00119	SAMPLE	214924-007	Water	155040	09/23/09 07:56	5.0	2	1:NA=50000
120	09i22m00120	SAMPLE	214924-009	Water	155040	09/23/09 08:06	5.0	2	1:NA=42000
121	09i22m00121	CCV				09/23/09 08:16	1.0	12 2	
122	09i22m00122	TUN				09/23/09 08:27	1.0	1	
123	09i22m00123	X	RINSE			09/23/09 08:34	1.0	2	
124	09i22m00124	CCB				09/23/09 08:46	1.0	2	
125	09i22m00125	ICSA				09/23/09 08:58	1.0	10 2	7:CA=310000
126	09i22m00126	ICSAB				09/23/09 09:09	1.0	11 2	11:CA=320000
127	09i22m00127	X	RINSE			09/23/09 09:19	1.0	2	
128	09i22m00128	X	RINSE			09/23/09 09:29	1.0	2	
129	09i22m00129	MSS	214920-002	Filtrate	155041	09/23/09 09:40	100.0	2	
130	09i22m00130	SER	QC512584	Filtrate	155041	09/23/09 09:50	500.0	2	
131	09i22m00131	PDS	QC512585	Filtrate	155041	09/23/09 10:00	100.0	13 14 2	
132	09i22m00132	MSS	214955-003	Filtrate	155041	09/23/09 10:11	100.0	2	
133	09i22m00133	BLANK	QC513164	Filtrate	155189	09/23/09 10:21	5.0	2	
134	09i22m00134	BS	QC513165	Filtrate	155189	09/23/09 10:31	5.0	2	
135	09i22m00135	BSD	QC513166	Filtrate	155189	09/23/09 10:41	5.0	2	
136	09i22m00136	MSS	215044-005	Filtrate	155189	09/23/09 10:51	5.0	2	
137	09i22m00137	CCV				09/23/09 11:01	1.0	12 2	
138	09i22m00138	CCB				09/23/09 11:11	1.0	2	
139	09i22m00139	X				09/23/09 11:21	1.0	2	
140	09i22m00140	SER	QC513171	Filtrate	155189	09/23/09 11:32	25.0	2	
141	09i22m00141	MS	QC513167	Filtrate	155189	09/23/09 11:42	5.0	2	
142	09i22m00142	MSD	QC513168	Filtrate	155189	09/23/09 11:52	5.0	2	
143	09i22m00143	PDS	QC513172	Filtrate	155189	09/23/09 12:02	5.0	13 14 2	
144	09i22m00144	MSS	215044-007	Filtrate	155189	09/23/09 12:12	5.0	2	
145	09i22m00145	MS	QC513169	Filtrate	155189	09/23/09 12:22	5.0	2	
146	09i22m00146	MSD	QC513170	Filtrate	155189	09/23/09 12:32	5.0	2	
147	09i22m00147	SAMPLE	215044-004	Filtrate	155189	09/23/09 12:42	5.0	2	
148	09i22m00148	SAMPLE	215044-006	Filtrate	155189	09/23/09 12:53	5.0	2	
149	09i22m00149	SAMPLE	215044-008	Filtrate	155189	09/23/09 13:03	5.0	2	2:CA=27000
150	09i22m00150	CCV				09/23/09 13:13	1.0	12 2	
151	09i22m00151	CCB				09/23/09 13:23	1.0	2	
152	09i22m00152	SAMPLE	215044-009	Filtrate	155189	09/23/09 13:33	5.0	2	
153	09i22m00153	SAMPLE	215044-011	Filtrate	155189	09/23/09 13:43	5.0	2	
154	09i22m00154	SAMPLE	215044-012	Filtrate	155189	09/23/09 13:53	5.0	2	
155	09i22m00155	CCV				09/23/09 14:04	1.0	12 2	
156	09i22m00156	CCB				09/23/09 14:14	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	09i22m00157	ICSA				09/23/09 14:24	1.0	10 2	7:CA=310000
158	09i22m00158	ICSAB				09/23/09 14:34	1.0	11 2	11:CA=320000
159	09i22m00159	X	RINSE			09/23/09 14:45	1.0	2	
160	09i22m00160	X	RINSE			09/23/09 14:55	1.0	2	
161	09i22m00161	SAMPLE	215058-001	Filtrate	155189	09/23/09 15:05	5.0	2	
162	09i22m00162	SAMPLE	215058-002	Filtrate	155189	09/23/09 15:15	5.0	2	
163	09i22m00163	SAMPLE	215058-003	Filtrate	155189	09/23/09 15:26	5.0	2	2:BA=900
164	09i22m00164	SAMPLE	215058-004	Filtrate	155189	09/23/09 15:36	5.0	2	
165	09i22m00165	SAMPLE	215058-005	Filtrate	155189	09/23/09 15:46	5.0	2	3:NA=24000
166	09i22m00166	SAMPLE	215058-006	Filtrate	155189	09/23/09 15:56	5.0	2	
167	09i22m00167	SAMPLE	215058-007	Filtrate	155189	09/23/09 16:06	5.0	2	
168	09i22m00168	SAMPLE	215058-008	Filtrate	155189	09/23/09 16:16	5.0	2	1:MN=230
169	09i22m00169	CCV				09/23/09 16:26	1.0	12 2	
170	09i22m00170	CCB				09/23/09 16:36	1.0	2	
171	09i22m00171	SAMPLE	215058-009	Filtrate	155189	09/23/09 16:47	5.0	2	1:MN=240
172	09i22m00172	SAMPLE	215058-003	Filtrate	155189	09/23/09 16:57	50.0	2	
173	09i22m00173	SAMPLE	215058-009	Filtrate	155189	09/23/09 17:07	5.0	2	1:MN=240
174	09i22m00174	CCV				09/23/09 17:17	1.0	12 2	
175	09i22m00175	CCB				09/23/09 17:27	1.0	2	
176	09i22m00176	BLANK	QC513173	Water	155190	09/23/09 17:37	5.0	2	
177	09i22m00177	BS	QC513174	Water	155190	09/23/09 17:47	5.0	2	
178	09i22m00178	BSD	QC513175	Water	155190	09/23/09 17:57	5.0	2	
179	09i22m00179	MSS	215051-001	Water	155190	09/23/09 18:07	5.0	2	
180	09i22m00180	MS	QC513176	Water	155190	09/23/09 18:17	5.0	2	1:NA=24000
181	09i22m00181	MSD	QC513177	Water	155190	09/23/09 18:27	5.0	2	1:NA=24000
182	09i22m00182	TUN				09/23/09 18:38	1.0	1	
183	09i22m00183	X	RINSE			09/23/09 18:45	1.0	2	
184	09i22m00184	SAMPLE	215051-002	Water	155190	09/23/09 18:55	5.0	2	
185	09i22m00185	SAMPLE	215051-003	Water	155190	09/23/09 19:05	5.0	2	
186	09i22m00186	SAMPLE	215051-004	Water	155190	09/23/09 19:15	5.0	2	1:NA=27000
187	09i22m00187	SAMPLE	215051-005	Water	155190	09/23/09 19:26	5.0	2	
188	09i22m00188	CCV				09/23/09 19:36	1.0	12 2	
189	09i22m00189	CCB				09/23/09 19:46	1.0	2	
190	09i22m00190	SAMPLE	215051-006	Water	155190	09/23/09 19:56	5.0	2	
191	09i22m00191	SAMPLE	215051-007	Water	155190	09/23/09 20:06	5.0	2	
192	09i22m00192	SAMPLE	215051-008	Water	155190	09/23/09 20:16	5.0	2	
193	09i22m00193	SAMPLE	215051-009	Water	155190	09/23/09 20:26	5.0	2	1:NA=26000
194	09i22m00194	SAMPLE	215051-010	Water	155190	09/23/09 20:36	5.0	2	1:NA=29000
195	09i22m00195	SAMPLE	215051-011	Water	155190	09/23/09 20:46	5.0	2	1:NA=38000
196	09i22m00196	CCV				09/23/09 20:56	1.0	12 2	
197	09i22m00197	CCB				09/23/09 21:06	1.0	2	
198	09i22m00198	BLANK	QC513001	Water	155149	09/23/09 21:17	5.0	2	
199	09i22m00199	BS	QC513002	Water	155149	09/23/09 21:27	5.0	2	
200	09i22m00200	BSD	QC513003	Water	155149	09/23/09 21:37	5.0	2	
201	09i22m00201	BLANK	QC513008	Filtrate	155150	09/23/09 21:47	5.0	2	
202	09i22m00202	SAMPLE	215019-001	Filtrate	155150	09/23/09 21:57	1.0	2	
203	09i22m00203	BS	QC513009	Filtrate	155150	09/23/09 22:07	5.0	2	
204	09i22m00204	BSD	QC513010	Filtrate	155150	09/23/09 22:17	5.0	2	
205	09i22m00205	CCV				09/23/09 22:27	1.0	12 2	
206	09i22m00206	CCB				09/23/09 22:37	1.0	2	
207	09i22m00207	SAMPLE	215019-008	Filtrate	155150	09/23/09 22:47	20.0	2	1:NA=78000
208	09i22m00208	MS	QC513011	Filtrate	155150	09/23/09 22:58	20.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019382324

Instrument : MET26 Begun : 09/22/09 12:04
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	09i22m00209	MSD	QC513012	Filtrate	155150	09/23/09 23:08	20.0	2	
210	09i22m00210	MSS	215019-005	Filtrate	155150	09/23/09 23:18	20.0	2	2:NA=140000
211	09i22m00211	SAMPLE	215019-006	Filtrate	155150	09/23/09 23:28	20.0	2	3:NA=440000
212	09i22m00212	SAMPLE	215019-007	Filtrate	155150	09/23/09 23:38	20.0	2	2:NA=410000
213	09i22m00213	CCV				09/23/09 23:49	1.0	12 2	
214	09i22m00214	X				09/23/09 23:58	1.0	12 2	
215	09i22m00215	CCB				09/24/09 00:08	1.0	2	
216	09i22m00216	ICSA				09/24/09 00:19	1.0	10 2	7:CA=310000
217	09i22m00217	ICSAB				09/24/09 00:29	1.0	11 2	10:CA=310000
218	09i22m00218	X	RINSE			09/24/09 00:39	1.0	2	
219	09i22m00219	X	RINSE			09/24/09 00:49	1.0	2	
220	09i22m00220	X	RINSE			09/24/09 01:00	1.0	2	
221	09i22m00221	X	RINSE			09/24/09 01:10	1.0	2	
222	09i22m00222	X	RINSE			09/24/09 01:20	1.0	2	

JYF 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 217.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1426200	4202107	35507	1106706	302030	28812	5178122	3644746	5969850	6509046
		LOWER LIMIT	427860	1260632	10652	332012	90609	8644	1553437	1093424	1790955	1952714
		UPPER LIMIT	1711440	5042528	42608	1328047	362436	34574	6213746	4373695	7163820	7810855
013	ICSA		1122115	4064155	38906	1095854	287631	31324	4573040	3008849	5788486	6047460
014	ICSAB		1185840	4075200	38606	1097087	287702	30793	4588646	2950313	5824168	6043107
017	SAMPLE	214901-008	1195205	4098211	37323	1087964	311981	31501	5160023	3794540	5956948	6574601
018	SAMPLE	214901-009	1124630	3964084	34872	1095176	312127	30268	5102115	3898495	5814418	6631027
019	SAMPLE	214901-010	1205564	3937581	35448	1046153	295793	29815	5049555	3801984	5758229	6580969
020	SAMPLE	214940-002	1292437	4006577	36144	1035178	290310	29974	5123661	3809238	5833072	6588164
022	CCV		1355195	4095701	37535	1092117	296054	30138	5055669	3679709	5873817	6566653
023	CCB		1388838	4134613	38559	1095114	298804	30568	5240336	3776534	5981504	6601696
024	ICSA		1169581	4110036	39149	1084873	284545	31083	4621067	3027792	5870795	6151323
025	ICSAB		1226515	4120176	39039	1099485	290535	31064	4646323	2988284	5890165	6173745
029	BLANK	QC513001	1146027	4016305	36765	1047950	307286	31648	5238769	4032072	5941125	6717424
030	BS	QC513002	1125933	3944472	35470	954399	281893	30613	5130001	3942564	5814943	6706436
031	BSD	QC513003	1111440	3996193	36204	1065864	304664	30908	5133925	3912970	5902588	6750275
032	MSS	214922-005	1008566	3592475	35621	1038049	309509	31516	4613138	3491813	5268774	6020203
033	SER	QC513006	1255837	4067566	37129	1080016	302932	30836	5213416	3910052	5971803	6710936
034	MS	QC513004	1109220	3913704	35030	1031872	301587	30448	4974930	3736373	5742061	6652241
035	MSD	QC513005	1115148	3954797	35114	1031335	300740	30510	5006844	3750796	5780900	6624476
036	PDS	QC513007	1111102	3977248	35729	1042213	303302	30640	4995586	3692640	5824526	6661695
037	CCV		1353838	4213937	38737	1096868	299011	30692	5195451	3690539	6091371	6705797
038	CCB		1384932	4251893	39872	1114143	307515	31648	5361999	3772791	6165105	6727674
039	CCB		1376928	4259612	39003	1110870	305548	31387	5389096	3868625	6184175	6827992
040	SAMPLE	214922-006	1105012	4044069	36658	1079523	312671	31749	5114831	3793007	5889880	6666649
041	SAMPLE	215020-001	1177852	4076050	37929	1079147	312139	31924	5041727	3653482	5911247	6620870
042	CCV		1300082	4226400	39670	1121213	302413	31677	5190531	3713010	6106738	6726236
043	CCB		1341682	4290409	39997	1127366	308484	32051	5362694	3797795	6140533	6731199
044	MSS	214922-005	1241138	4124483	38190	1098169	305020	31457	5331921	3948880	6056250	6763146
045	SER	QC513006	1259794	4182088	38242	1092843	304094	31267	5333018	3894041	6070340	6809450
046	PDS	QC513007	1201857	4165889	37512	1092811	298343	30761	5176113	3804410	6068747	6778839
047	SAMPLE	214922-006	1219580	4166640	37792	1114689	309826	31101	5358009	3936059	6076688	6849900
048	SAMPLE	214809-004	1293549	4190238	38104	1091608	302116	31035	5239648	3852891	6017405	6749477
049	SAMPLE	214865-001	1306271	4165200	37815	1106294	301250	30751	5308001	3912130	6052464	6736396
050	CCV		1260816	4216829	38613	1113585	302779	31028	5226616	3742517	6086628	6739690
051	CCB		1293732	4192605	38292	1103494	303412	30946	5335610	3820173	6120985	6747377
052	ICSA		1089794	4117425	41428	1102374	286143	32510	4638351	3019927	5886554	6113153
053	ICSAB		1135718	4151901	39279	1114014	289768	31378	4644501	2985611	5942840	6147883
056	BLANK	QC512579	1373295	4280168	39793	1112128	307813	32044	5388616	3816148	6183932	6734099
057	BS	QC512580	1378107	4281688	39451	1106231	303195	31472	5405221	3891882	6229038	6883011
058	BSD	QC512581	1350267	4200771	39236	1114818	303526	31499	5295876	3837470	6104644	6739231
059	MSS	214920-002	1347982	4209515	39798	1095400	295210	31742	5193013	3673257	6008760	6584682
060	SER	QC512584	1458654	4525569	38221	1095725	302371	31414	5698806	4120850	6587131	7276183
063	MS	QC512582	1307860	4117594	37682	1064758	289971	30479	5130225	3654070	5962798	6585303
064	MSD	QC512583	1335324	4167553	37995	1073671	292443	30973	5137747	3660839	6020054	6661633
065	PDS	QC512585	1347967	4256435	38438	1088181	294337	30766	5203909	3668211	6088386	6723988
066	CCV		1383569	4314711	38765	1154398	310883	30935	5358905	3845555	6272096	6899291
067	CCV		1366923	4203769	38633	1101849	298363	31270	5209749	3749899	6097061	6776134
068	CCB		1402978	4260559	39056	1091528	299844	31569	5391198	3848253	6191648	6795961
069	CCB		1359080	4146058	39156	1073510	298565	31360	5288546	3816938	6058176	6635174
070	MSS	214955-003	1351923	4122001	37904	1074941	291057	30499	5080789	3576411	5927226	6521004

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
071	MS	QC512586	1378308	4143279	37921	1057212	288225	30609	5018946	3535093	5927232	6505603
072	MSD	QC512587	1360538	4116438	37709	1070277	286942	30129	5003711	3518555	5922074	6456056
073	SAMPLE	214811-003	1328507	4072608	37030	1067036	293091	30472	5189982	3796660	5931910	6591962
074	SAMPLE	214811-004	1301603	4058201	36580	1047070	287102	29963	5098099	3776981	5867873	6571092
075	SAMPLE	214811-003	1325808	4054960	36801	1045998	282260	29714	5008199	3575097	5877891	6471756
076	CCV		1315628	4109853	37077	1064699	286706	29928	5074567	3697852	5948986	6596930
077	CCB		1342345	4094934	37800	1059032	290191	30301	5189901	3697669	5931948	6535657
078	BLANK	QC512540	1219957	4024198	36562	1045030	288413	29778	5140356	3814590	5860161	6552712
079	BS	QC512541	1225660	4011289	36027	1041890	285134	29641	5104486	3814302	5841704	6567131
080	BSD	QC512542	1214188	3983405	35807	1032347	281611	29395	5094284	3795482	5832789	6542846
081	MSS	214910-004	1212552	4115728	36956	1062940	286861	29796	5130431	3836918	6010118	6597024
082	MS	QC512543	1213131	4101826	37061	1065541	285159	29788	5111603	3795327	6015997	6574943
083	MSD	QC512544	1205184	4127796	36980	1030921	279182	29572	5053624	3766791	6023469	6513143
084	SAMPLE	214910-005	1186854	4150580	37395	1067559	284741	29715	5119779	3775982	6017003	6488747
085	SAMPLE	214910-006	1202099	4099877	36721	1064283	285286	29861	5059920	3783388	5934256	6473432
086	SAMPLE	214912-001	1169646	4041984	36878	1071320	287041	29816	5071437	3761807	5964424	6470209
087	SAMPLE	214912-002	1178538	4082518	36705	1069779	285988	29698	5041790	3741743	5969713	6461114
088	CCV		1198559	3914889	36660	1048028	283158	29389	4867924	3474030	5662834	6187790
089	CCB		1257518	4080447	37213	1062887	288889	30047	5084661	3643223	5894729	6408696
090	CCB		1232877	4072298	37230	1068205	289978	29784	5109480	3673692	5871986	6421368
091	SAMPLE	214912-003	1195598	4113746	37327	1074256	287199	30197	5071713	3770033	5915062	6507981
092	CCV		1185994	4039108	36569	1049914	285400	29461	4980191	3553501	5826791	6399871
093	CCB		1255888	4109998	37366	1068145	288474	29984	5159534	3666407	5890176	6447571
094	ICSA		1020535	3917547	36365	1026848	267542	29312	4438875	2933773	5624548	5889249
095	ICSAB		1072168	3910070	35891	1025112	268853	29275	4424949	2885924	5597321	5869426
098	SAMPLE	214922-003	1209030	3973265	36461	1044964	291520	30406	5093870	3764604	5782563	6478408
099	SAMPLE	214922-004	1206925	3992208	35846	1029485	289241	29583	5090128	3786688	5835470	6530789
100	SAMPLE	214924-002	1225846	3984565	35551	1023383	286555	29756	5099365	3795196	5780504	6537645
101	SAMPLE	214924-003	1215006	3916714	35710	1014630	284270	29343	5033969	3790364	5760162	6450408
102	SAMPLE	214924-004	1225922	3948358	35307	1021783	284167	29134	5115197	3813479	5791624	6529758
103	SAMPLE	214924-005	1229510	3952432	35049	1013048	283348	29229	5115096	3860485	5785663	6558146
104	SAMPLE	214924-006	1227358	3990623	35236	1013952	283711	29352	5133979	3856260	5800721	6595484
105	SAMPLE	214924-007	1226472	3993111	35062	1013731	283200	29391	5123736	3860810	5815799	6616805
106	CCV		1238039	3978675	35058	1033160	278428	28627	4952339	3629195	5788804	6471111
107	CCB		1291059	3931390	35596	1013889	281845	29145	5030172	3671893	5764425	6370259
108	CCB		1271822	3963257	35559	1031535	281482	28969	5072901	3738169	5784335	6466264
109	SAMPLE	214924-009	1169224	3928161	34484	1001236	279700	28594	4996541	3782522	5694176	6418121
110	CCV		1229576	3945454	34444	1009302	274927	28414	4931445	3645550	5740356	6414958
111	CCB		1280800	3968879	35069	1113851	299431	28695	5068785	3718169	5780762	6462348
112	SAMPLE	214922-003	1224490	3943944	34820	1005405	274981	28840	4946616	3680130	5747666	6399536
113	SAMPLE	214922-004	1237166	3920572	34516	994060	273401	28260	4865939	3572952	5610306	6272882
114	SAMPLE	214924-002	1247322	3887360	34637	996032	275524	28633	4973459	3635503	5653401	6341947
115	SAMPLE	214924-003	1251540	3906172	34474	996917	274660	28484	4947584	3644372	5679925	6395746
116	SAMPLE	214924-004	1251417	3913043	34446	1092394	292082	28452	4904363	3634481	5658411	6300996
117	SAMPLE	214924-005	1248157	3938360	32639	1000156	273886	26859	4933175	3679955	5697367	6362477
118	SAMPLE	214924-006	1241012	3897465	34791	999775	276291	28722	4909307	3674110	5710894	6322737
119	SAMPLE	214924-007	1246902	3929238	34420	985114	275402	28455	4954837	3641888	5678232	6366732
120	SAMPLE	214924-009	1247275	3927223	34472	994649	272178	28351	4977294	3615370	5673886	6431632
121	CCV		1194850	3925713	34006	1001998	272587	28053	4921501	3632458	5739930	6442890
124	CCB		1253777	3970312	36450	1018226	280576	29422	5051246	3723588	5794642	6428234
125	ICSA		1025341	3891478	35408	1002899	264253	28774	4446705	2971566	5568037	5939299
126	ICSAB		1067860	3839258	34874	989505	262831	28331	4384688	2913747	5504487	5867836

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
129	MSS	214920-002	1235706	3883050	33847	990130	277528	28598	5039557	3814100	5689937	6425871
130	SER	QC512584	1242403	3852048	33505	973493	274803	28156	4973223	3792296	5662789	6405393
131	PDS	QC512585	1210774	3822085	32478	963216	266258	27251	4887605	3704844	5616487	6424498
132	MSS	214955-003	1224383	3795169	32983	960782	271103	28076	4953463	3803462	5598243	6373994
133	BLANK	QC513164	1300979	3835619	33211	968774	269990	27735	5004196	3772580	5655102	6425367
134	BS	QC513165	1246712	3847603	32776	963390	266915	27445	4971951	3831922	5662108	6540026
135	BSD	QC513166	1231867	3818059	32941	980225	269519	27326	4942497	3820609	5626704	6486090
136	MSS	215044-005	1256013	3803085	32661	963320	269811	27506	5015902	3852179	5604973	6541347
137	CCV		1245554	3841745	32741	980292	268268	27315	4907911	3740265	5653311	6479552
138	CCB		1293579	3871636	33837	871677	243686	27599	4992455	3784585	5684601	6476168
140	SER	QC513171	1256932	3758726	32588	963278	270997	27334	4994402	3850571	5549344	6480961
141	MS	QC513167	1222315	3758698	32399	959484	269691	27131	4874744	3801767	5522851	6405595
142	MSD	QC513168	1236131	3801437	32292	964029	268575	27290	4946927	3814553	5617795	6466206
143	PDS	QC513172	1213205	3829389	32599	977349	266936	27143	4890755	3749263	5617708	6472398
144	MSS	215044-007	1199670	3759230	32750	972780	271112	27688	4970603	3892976	5607946	6489953
145	MS	QC513169	1193119	3798830	32573	960879	268595	27569	4927537	3824253	5624719	6460396
146	MSD	QC513170	1188281	3783983	32613	969638	269119	27281	4963793	3817862	5624517	6509186
147	SAMPLE	215044-004	1200013	3758248	32137	960316	268889	27153	4946592	3849657	5569422	6478311
148	SAMPLE	215044-006	1213889	3758703	32618	964233	271210	27524	4953621	3901973	5541466	6423858
149	SAMPLE	215044-008	1120882	3797355	32193	962430	266636	27031	4884511	3786195	5522403	6406408
150	CCV		1168331	3799471	32710	967839	266605	27175	4870720	3741669	5548119	6437043
151	CCB		1225723	3826207	33361	984719	273171	27830	4967340	3808512	5613723	6403782
152	SAMPLE	215044-009	1213254	3743883	32704	975576	272036	27605	4927300	3804861	5549837	6458150
153	SAMPLE	215044-011	1216648	3737986	32682	962084	270156	27507	4942906	3854211	5538906	6443911
154	SAMPLE	215044-012	1210198	3776409	30678	955217	268006	25661	4909556	3836339	5557993	6404346
155	CCV		1164413	3770635	32632	968256	266263	26886	4842610	3756526	5584637	6430048
156	CCB		1233338	3812539	32913	971777	273226	27515	5003992	3845693	5606571	6475404
161	SAMPLE	215058-001	1307207	3831968	34223	990688	276063	28597	5007399	3893147	5696928	6487360
162	SAMPLE	215058-002	1299613	3793860	33837	975272	278096	28443	4977914	3869169	5649294	6410376
163	SAMPLE	215058-003	1296398	3860048	33950	982972	274525	28191	4955951	3794830	5627750	6493971
164	SAMPLE	215058-004	1287000	3773520	33639	977996	274342	27836	4999160	3806495	5604761	6566116
165	SAMPLE	215058-005	1334410	3796329	33133	973534	269610	27584	4868344	3677358	5489444	6359915
166	SAMPLE	215058-006	1352657	3820890	33830	972154	276916	28309	5007449	3839955	5593012	6479347
167	SAMPLE	215058-007	1307598	3773144	33618	967356	273692	28232	4986425	3882765	5602722	6564196
168	SAMPLE	215058-008	1297435	3790558	33316	988567	273860	27968	5000944	3910361	5616346	6495056
169	CCV		1260284	3769094	32793	938989	265559	27422	4870059	3783520	5600145	6426232
170	CCB		1303850	3823878	33774	992162	275574	28042	5022909	3848947	5637947	6530086
171	SAMPLE	215058-009	1238070	3767561	33334	971326	274010	28039	5025324	3953398	5656252	6491894
172	SAMPLE	215058-003	1258031	3745487	33259	969251	272638	27868	5000836	3938267	5594183	6526876
173	SAMPLE	215058-009	1249181	3735042	33061	965287	271308	27891	4983115	3940309	5594831	6563152
176	BLANK	QC513173	1231479	3773553	33480	968131	273311	28026	5026165	3950792	5610951	6520137
177	BS	QC513174	1215927	3725126	33163	967749	269977	27494	4936614	3889418	5566965	6459804
178	BSD	QC513175	1225157	3736064	33107	958832	268659	27623	4983188	3911487	5576965	6575672
180	MS	QC513176	1226611	3752846	33111	967662	270692	27911	4907642	3850092	5593400	6524106
181	MSD	QC513177	1217687	3740747	33004	962443	268884	27615	4914919	3823595	5528643	6471218
198	BLANK	QC513001	962453	3646235	31309	928907	273393	27449	4976962	4057582	5514968	6540073
199	BS	QC513002	927550	3646935	30831	924626	269833	27372	4881449	3969730	5491089	6579748
200	BSD	QC513003	908117	3600684	30638	922657	269130	27179	4895626	3963275	5471342	6576855
201	BLANK	QC513008	1146704	3746216	32768	962508	271344	27557	5038051	3915305	5625675	6578038
202	SAMPLE	215019-001	1193569	3820206	33231	971857	273205	27932	5040387	3982010	5687363	6593733
203	BS	QC513009	1147105	3774095	32915	969261	270381	27573	5008609	3883212	5632696	6527093
204	BSD	QC513010	1145367	3790376	33288	975991	272344	27789	5034365	3955046	5674526	6655807

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09 Reference : 09i22m00003
Sequence : MET26 09i22m00 Analyzed : 09/22/09 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
205	CCV		1152183	3810284	33188	980814	271400	27396	4938717	3810263	5619541	6524432
206	CCB		1177955	3807623	33526	976608	273285	28184	5051431	3906999	5696146	6601805
207	SAMPLE	215019-008	1232176	3788144	33264	965633	265962	27230	4826739	3643235	5515747	6352681
208	MS	QC513011	1259041	3813558	33659	961632	264319	27486	4851389	3612064	5576878	6395999
209	MSD	QC513012	1273023	3821663	33690	979157	265349	27320	4818851	3572648	5544609	6366427
210	MSS	215019-005	1320124	3856610	34248	971549	264455	27483	4762401	3479197	5514894	6268006
211	SAMPLE	215019-006	1339544	3870255	35803	972994	257591	27744	4560153	3071810	5430250	5908971
212	SAMPLE	215019-007	1383076	3971933	37256	1019627	268438	28881	4629562	3065477	5531203	5940272
213	CCV		1328805	3972110	36280	1042760	286071	29694	5094606	3746215	5839465	6606295
215	CCB		1317019	3999446	35537	1019407	283581	29557	5147355	3882085	5860243	6646245

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019382324

Date : 09/22/09
Sequence : MET26 09i22m00

Reference : 09i22m00003
Analyzed : 09/22/09 12:21

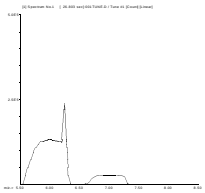
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1426200	4202107	35507	1106706	302030	28812	5178122	3644746	5969850	6509046
		LOWER LIMIT	855720	2521264	21304	664024	181218	17287	3106873	2186848	3581910	3905428
		UPPER LIMIT	1782750	5252634	44384	1383383	377538	36015	6472653	4555933	7462313	8136308
011	ICB		1381036	4281565	40282	1121584	306381	31949	5306147	3716443	6125637	6634244
157	ICSA		1020364	3709798	33304	952420	254521	27574	4303585	3047361	5349324	5934739
158	ICSAB		1077376	3700622	32995	963020	259410	27659	4292469	2997467	5340506	5891610
174	CCV		1231097	3758304	33116	968486	268741	27213	4908016	3779477	5574819	6493424
175	CCB		1285240	3801530	33812	966827	272631	28090	5043025	3879668	5648273	6508896
179	MSS	215051-001	1237806	3606767	31842	939194	271661	27797	4932758	3899045	5547446	6538545
184	SAMPLE	215051-002	1252231	3658539	31959	947791	268880	27280	4913324	3894391	5533527	6483900
185	SAMPLE	215051-003	1237761	3696890	32753	952592	268109	27581	4971171	3881434	5558341	6502992
186	SAMPLE	215051-004	1226665	3651244	32070	932180	267429	27518	4895579	3892496	5529279	6491118
187	SAMPLE	215051-005	1220149	3708873	32710	965673	270834	27524	4915109	3852149	5567310	6517588
188	CCV		1186470	3736693	32727	973842	268658	27225	4877105	3788113	5568375	6523750
189	CCB		1238074	3761112	33573	968529	273734	27864	5011842	3904257	5626499	6493180
190	SAMPLE	215051-006	1224767	3737463	32680	966575	270865	27727	4942390	3864065	5559709	6524714
191	SAMPLE	215051-007	1219588	3673217	32318	955489	271499	27866	4917924	3917813	5594643	6470706
192	SAMPLE	215051-008	1214579	3692826	32635	953351	269964	27795	4919961	3871383	5585345	6496587
193	SAMPLE	215051-009	1218393	3627354	31931	938647	269284	27274	4899941	3829836	5554085	6462384
194	SAMPLE	215051-010	1230411	3678918	32206	932590	269003	27687	4904274	3815713	5583886	6470657
195	SAMPLE	215051-011	1247684	3656400	32160	935126	268577	27736	4919419	3812931	5583064	6497379
196	CCV		1196198	3804219	33286	987430	270618	27443	4930211	3787231	5623227	6516118
197	CCB		1253235	3810190	33788	981713	274314	27956	5038413	3902608	5691578	6551501
216	ICSA		1028358	3806505	34890	1000795	263138	28602	4419937	3105197	5486827	6041561
217	ICSAB		1048947	3763480	34362	983134	262507	28278	4413556	3067888	5475856	6035247

MET26 QC Tune Report

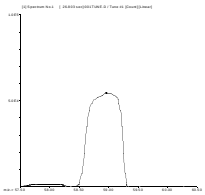
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\001TUNE.D
Date Acquired: Sep 22 2009 12:04 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

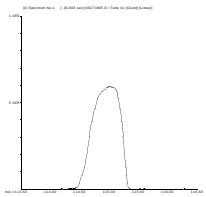
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	159346	156825	155086	154431	1.35	5.00	
59 Co	325938	325066	323745	322697	0.35	5.00	
115 In	3268321	3244642	3271935	3254096	1.34	5.00	
205 Tl	218210	216110	216373	215981	0.59	5.00	



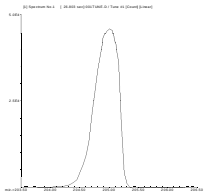
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



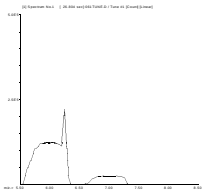
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

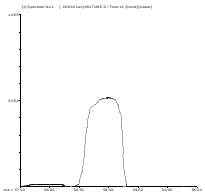
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\061TUNE.D
Date Acquired: Sep 22 2009 10:13 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

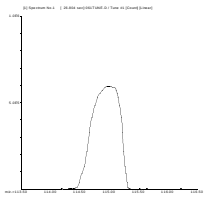
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	144306	144284	143296	144149	0.63	5.00	
59 Co	309492	307353	307050	308050	0.32	5.00	
115 In	3250252	3277926	3314715	3286640	1.51	5.00	
205 Tl	210707	211711	211260	212230	0.86	5.00	



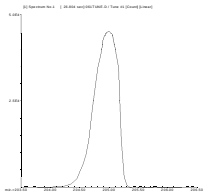
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



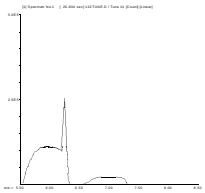
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

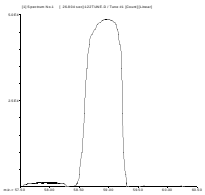
Data File: C:\ICPCHEM\1\DATA\09I22m00.B\122TUNE.D
Date Acquired: Sep 23 2009 08:27 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

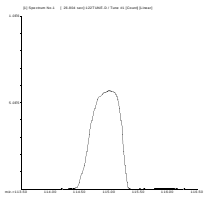
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	132530	131259	131924	130905	0.36	5.00	
59 Co	295144	294645	293760	294761	0.47	5.00	
115 In	3154991	3152347	3179680	3177290	1.17	5.00	
205 Tl	206365	206802	207870	208093	0.42	5.00	



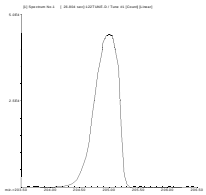
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 METALS Water: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019382324001 Date : 22-SEP-2009 12:21
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i22m00004	1019382324004		22-SEP-2009 12:31	S12854, S12847
L2	09i22m00005	1019382324005		22-SEP-2009 12:41	S12855, S12847
L3	09i22m00006	1019382324006		22-SEP-2009 12:51	S12856, S12847
L4	09i22m00007	1019382324007		22-SEP-2009 13:01	S12857, S12847
L5	09i22m00008	1019382324008		22-SEP-2009 13:11	S12852, S12847
L6	09i22m00009	1019382324009		22-SEP-2009 13:21	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0060	0.0046	0.0045	0.0043	0.0043	0.0043	BLNK	-2.5841	234.224		0.0047	1.000	0.995	
Antimony	A	0.0071	0.0028	0.0028	0.0027	0.0029	0.0028	BLNK	-0.0060	352.601		0.0035	1.000	0.995	
Barium	A	0.0014	8.7E-4	8.1E-4	7.8E-4	7.7E-4	8.1E-4	BLNK	-0.0106	1243.39		9.0E-4	1.000	0.995	
Beryllium	A	0.0036	0.0028	0.0029	0.0028	0.0028	0.0029	BLNK	-0.0128	348.699		0.0030	1.000	0.995	
Cadmium	A	8.6E-4	7.6E-4	7.1E-4	6.9E-4	6.9E-4	6.9E-4	BLNK	-0.0122	1455.12		7.3E-4	1.000	0.995	
Calcium	A	9.8E-4	3.4E-4	2.6E-4	2.0E-4	1.9E-4	1.8E-4	BLNK	-33.937	5466.88		3.6E-4	1.000	0.995	
Lead	A	0.0189	0.0079	0.0065	0.0054	0.0054	0.0053	BLNK	-0.2388	189.259		0.0082	1.000	0.995	
Magnesium	A	0.0047	0.0036	0.0035	0.0033	0.0033	0.0033	BLNK	-1.7149	306.140		0.0036	1.000	0.995	
Potassium	A	0.0817	0.0208	0.0133	0.0065	0.0060	0.0058	BLNK	-129.53	172.711		0.0224	1.000	0.995	
Silver	A	0.0048	0.0036	0.0034	0.0033	0.0035	0.0034	BLNK	-0.0126	294.870		0.0037	1.000	0.995	
Thallium	A	0.0099	0.0071	0.0070	0.0066	0.0074	0.0073	BLNK	-0.0162	135.798		0.0076	1.000	0.995	
Arsenic	E	0.0080	0.0068	0.0062	0.0060	0.0059	0.0058	BLNK	-0.0210	170.652		0.0065	1.000	0.995	
Chromium	E	0.1911	0.0725	0.0601	0.0479	0.0466	0.0462	BLNK	-0.2394	21.6511		0.0774	1.000	0.995	
Manganese	E	0.0277	0.0179	0.0168	0.0159	0.0156	0.0154	BLNK	-0.0163	64.6942		0.0182	1.000	0.995	
Nickel	E	0.0504	0.0316	0.0282	0.0273	0.0260	0.0254	BLNK	-0.0413	39.1422		0.0315	1.000	0.995	
Sodium	E	0.0319	0.0100	0.0068	0.0046	0.0042	0.0041	BLNK	-69.469	243.211		0.0103	1.000	0.995	
Zinc	E	0.1268	0.0346	0.0223	0.0111	0.0097	0.0093	BLNK	-0.2663	106.662		0.0356	0.999	0.995	
Iron	H	0.0127	0.0088	0.0088	0.0082	0.0080	0.0080	BLNK	-1.3932	125.121		0.0091	1.000	0.995	
Selenium	H	0.0013	0.0011	0.0011	0.0011	0.0011	0.0011	BLNK	-0.0131	939.657		0.0011	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	14	50.00	4	100.0	2	1000	0	10000	1	20000	0
Antimony	A	0.100	144	0.500	-3	1.000	-2	10.00	-6	100.0	2	200.0	0
Barium	A	0.100	60	0.500	6	1.000	-1	10.00	-3	100.0	-4	200.0	1
Beryllium	A	0.100	12	0.500	-6	1.000	-1	10.00	-2	100.0	-3	200.0	1
Cadmium	A	0.100	14	0.500	8	1.000	1	10.00	0	100.0	1	200.0	0
Calcium	A	10.00	94	50.00	17	100.0	7	1000	5	10000	2	20000	0
Lead	A	0.100	19	0.500	1	1.000	-1	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	27	50.00	6	100.0	5	1000	1	10000	1	20000	0
Potassium	A	10.00	16	50.00	0	100.0	1	1000	0	10000	2	20000	0
Silver	A	0.100	28	0.500	3	1.000	0	10.00	-3	100.0	2	200.0	0
Thallium	A	0.050	2	0.250	-10	0.500	-9	5.000	-10	50.00	1	100.0	0
Arsenic	E	0.100	15	0.500	12	1.000	3	10.00	3	100.0	1	200.0	0
Chromium	E	0.100	74	0.500	9	1.000	6	10.00	1	100.0	1	200.0	0
Manganese	E	0.100	63	0.500	13	1.000	7	10.00	3	100.0	1	200.0	0
Nickel	E	0.100	56	0.500	15	1.000	6	10.00	6	100.0	2	200.0	0
Sodium	E	10.00	-18	50.00	4	100.0	-3	1000	4	10000	2	20000	0
Zinc	E	0.100	986	0.500	216	1.000	111	10.00	16	100.0	3	200.0	-1
Iron	H	10.00	45	50.00	8	100.0	8	1000	2	10000	0	20000	0
Selenium	H	0.100	13	0.500	4	1.000	4	10.00	3	100.0	2	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 METALS Water
EPA 6020

Inst : MET26
Calnum : 1019382324001 Cal Date : 22-SEP-2009

ICV 1019382324010 (09i22m00010 22-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10320	ug/L	3	10	
Antimony	A	100.0	102.8	ug/L	3	10	
Barium	A	100.0	96.05	ug/L	-4	10	
Beryllium	A	100.0	97.33	ug/L	-3	10	
Cadmium	A	100.0	99.41	ug/L	-1	10	
Calcium	A	10000	10030	ug/L	0	10	
Lead	A	100.0	101.0	ug/L	1	10	
Magnesium	A	10000	10150	ug/L	2	10	
Potassium	A	10000	10200	ug/L	2	10	
Silver	A	100.0	106.6	ug/L	7	10	
Thallium	A	50.00	50.94	ug/L	2	10	
Arsenic	E	100.0	103.0	ug/L	3	10	
Chromium	E	100.0	99.32	ug/L	-1	10	
Manganese	E	100.0	97.47	ug/L	-3	10	
Nickel	E	100.0	99.58	ug/L	0	10	
Sodium	E	10000	10080	ug/L	1	10	
Zinc	E	100.0	100.3	ug/L	0	10	
Iron	H	10000	9941	ug/L	-1	10	
Selenium	H	100.0	100.4	ug/L	0	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324011.1 File : 09i22m00011 Time : 22-SEP-2009 13:41
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02060]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.105]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1381036	-3.17
Scandium	A	4202107	4281565	1.89
Scandium	E	35507	40282	13.45
Scandium	H	1106706	1121584	1.34
Germanium	H	302030	306381	1.44
Germanium	E	28812	31949	10.89
Indium	A	5178122	5306147	2.47
Bismuth	A	3644746	3716443	1.97
Yttrium	A	5969850	6125637	2.61
Terbium	A	6509046	6634244	1.92

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324092 File : 09i22m00092 Time : 23-SEP-2009 03:22
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9880	ug/L	-1	10	
Antimony	A	0.0035	0.0028	100.0	99.46	ug/L	-1	10	
Barium	A	9.0E-4	7.6E-4	100.0	93.89	ug/L	-6	10	
Beryllium	A	0.0030	0.0028	100.0	96.88	ug/L	-3	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	95.46	ug/L	-5	10	
Calcium	A	3.6E-4	1.8E-4	10000	9783	ug/L	-2	10	
Lead	A	0.0082	0.0052	100.0	98.24	ug/L	-2	10	
Magnesium	A	0.0036	0.0031	10000	9600	ug/L	-4	10	
Potassium	A	0.0224	0.0059	10000	10030	ug/L	0	10	
Silver	A	0.0037	0.0035	100.0	103.2	ug/L	3	10	
Thallium	A	0.0076	0.0073	50.00	49.28	ug/L	-1	10	
Arsenic	E	0.0065	0.0059	100.0	100.0	ug/L	0	10	
Chromium	E	0.0774	0.0452	100.0	97.53	ug/L	-2	10	
Manganese	E	0.0182	0.0149	100.0	96.11	ug/L	-4	10	
Nickel	E	0.0315	0.0251	100.0	98.25	ug/L	-2	10	
Sodium	E	0.0103	0.0041	10000	9892	ug/L	-1	10	
Zinc	E	0.0356	0.0091	100.0	97.22	ug/L	-3	10	
Iron	H	0.0091	0.0079	10000	9831	ug/L	-2	10	
Selenium	H	0.0011	0.0010	100.0	98.31	ug/L	-2	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1185994	-16.84
Scandium	A	4202107	4039108	-3.88
Scandium	E	35507	36569	2.99
Scandium	H	1106706	1049914	-5.13
Germanium	H	302030	285400	-5.51
Germanium	E	28812	29461	2.25
Indium	A	5178122	4980191	-3.82
Bismuth	A	3644746	3553501	-2.50
Yttrium	A	5969850	5826791	-2.40
Terbium	A	6509046	6399871	-1.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324093 File : 09i22m00093 Time : 23-SEP-2009 03:32
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02990]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.883]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1255888	-11.94
Scandium	A	4202107	4109998	-2.19
Scandium	E	35507	37366	5.24
Scandium	H	1106706	1068145	-3.48
Germanium	H	302030	288474	-4.49
Germanium	E	28812	29984	4.07
Indium	A	5178122	5159534	-0.36
Bismuth	A	3644746	3666407	0.59
Yttrium	A	5969850	5890176	-1.33
Terbium	A	6509046	6447571	-0.94

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324094 File : 09i22m00094 Time : 23-SEP-2009 03:42
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2840	0.1000	ug/L	!a+
Barium	A	1.392	0.1000	ug/L	!a+
Beryllium	A	[0.03200]	0.1000	ug/L	
Cadmium	A	2.822	0.1000	ug/L	!a+
Lead	A	1.238	0.1000	ug/L	!a+
Silver	A	0.1712	0.1000	ug/L	!a+
Thallium	A	0.08410	0.05000	ug/L	!a+
Arsenic	E	0.3593	0.1000	ug/L	!a+
Chromium	E	1.060	0.1000	ug/L	!a+
Manganese	E	6.305	0.1000	ug/L	!a+
Nickel	E	3.627	0.1000	ug/L	!a+
Zinc	E	6.345	0.1000	ug/L	!a+
Selenium	H	0.2311	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	103400	ug/L	103
Calcium	A	300000	314300	ug/L	105
Magnesium	A	100000	98100	ug/L	98
Molybdenum	A	2000	1981	ug/L	99
Potassium	A	100000	105000	ug/L	105
Sodium	E	250000	248200	ug/L	99
Iron	H	250000	248900	ug/L	100

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1020535	-28.44
Scandium	A	4202107	3917547	-6.77
Scandium	E	35507	36365	2.42
Scandium	H	1106706	1026848	-7.22
Germanium	H	302030	267542	-11.42
Germanium	E	28812	29312	1.74
Indium	A	5178122	4438875	-14.28
Bismuth	A	3644746	2933773	-19.51
Yttrium	A	5969850	5624548	-5.78
Terbium	A	6509046	5889249	-9.52

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324095 File : 09i22m00095 Time : 23-SEP-2009 03:53
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104600	ug/L	5		
Cadmium	A	100.0	106.3	ug/L	6	20	
Calcium	A	300000	319000	ug/L	6		
Magnesium	A	100000	100800	ug/L	1		
Potassium	A	100000	0	ug/L	-100		sat ***
Silver	A	50.00	53.25	ug/L	7	20	
Arsenic	E	100.0	108.9	ug/L	9	20	
Chromium	E	200.0	209.8	ug/L	5	20	
Manganese	E	200.0	212.9	ug/L	6	20	
Nickel	E	200.0	195.0	ug/L	-2	20	
Sodium	E	250000	255600	ug/L	2		
Zinc	E	100.0	96.52	ug/L	-3	20	
Iron	H	250000	253200	ug/L	1		
Selenium	H	100.0	107.6	ug/L	8	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	1025112	-7.37
Scandium	A	4202107	3910070	-6.95
Scandium	E	35507	35891	1.08
Germanium	H	302030	268853	-10.98
Germanium	E	28812	29275	1.61
Indium	A	5178122	4424949	-14.55
Yttrium	A	5969850	5597321	-6.24

sat=saturated

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324106 File : 09i22m00106 Time : 23-SEP-2009 05:45
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9796	ug/L	-2	10	
Antimony	A	0.0035	0.0028	100.0	99.36	ug/L	-1	10	
Barium	A	9.0E-4	7.5E-4	100.0	93.67	ug/L	-6	10	
Beryllium	A	0.0030	0.0027	100.0	93.10	ug/L	-7	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	96.32	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9731	ug/L	-3	10	
Lead	A	0.0082	0.0053	100.0	99.99	ug/L	0	10	
Magnesium	A	0.0036	0.0031	10000	9606	ug/L	-4	10	
Potassium	A	0.0224	0.0058	10000	9918	ug/L	-1	10	
Silver	A	0.0037	0.0035	100.0	103.1	ug/L	3	10	
Thallium	A	0.0076	0.0073	50.00	49.22	ug/L	-2	10	
Arsenic	E	0.0065	0.0058	100.0	99.08	ug/L	-1	10	
Chromium	E	0.0774	0.0453	100.0	97.74	ug/L	-2	10	
Manganese	E	0.0182	0.0149	100.0	96.06	ug/L	-4	10	
Nickel	E	0.0315	0.0251	100.0	98.34	ug/L	-2	10	
Sodium	E	0.0103	0.0040	10000	9771	ug/L	-2	10	
Zinc	E	0.0356	0.0091	100.0	97.18	ug/L	-3	10	
Iron	H	0.0091	0.0078	10000	9753	ug/L	-2	10	
Selenium	H	0.0011	0.0010	100.0	98.58	ug/L	-1	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1238039	-13.19
Scandium	A	4202107	3978675	-5.32
Scandium	E	35507	35058	-1.26
Scandium	H	1106706	1033160	-6.65
Germanium	H	302030	278428	-7.81
Germanium	E	28812	28627	-0.64
Indium	A	5178122	4952339	-4.36
Bismuth	A	3644746	3629195	-0.43
Yttrium	A	5969850	5788804	-3.03
Terbium	A	6509046	6471111	-0.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324107 File : 09i22m00107 Time : 23-SEP-2009 05:55
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03130]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[4.076]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1291059	-9.48
Scandium	A	4202107	3931390	-6.44
Scandium	E	35507	35596	0.25
Scandium	H	1106706	1013889	-8.39
Germanium	H	302030	281845	-6.68
Germanium	E	28812	29145	1.16
Indium	A	5178122	5030172	-2.86
Bismuth	A	3644746	3671893	0.74
Yttrium	A	5969850	5764425	-3.44
Terbium	A	6509046	6370259	-2.13

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324108 File : 09i22m00108 Time : 23-SEP-2009 06:05
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1271822	-10.82
Scandium	A	4202107	3963257	-5.68
Scandium	E	35507	35559	0.15
Scandium	H	1106706	1031535	-6.79
Germanium	H	302030	281482	-6.80
Germanium	E	28812	28969	0.54
Indium	A	5178122	5072901	-2.03
Bismuth	A	3644746	3738169	2.56
Yttrium	A	5969850	5784335	-3.11
Terbium	A	6509046	6466264	-0.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324110 File : 09i22m00110 Time : 23-SEP-2009 06:25
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9761	ug/L	-2	10	
Antimony	A	0.0035	0.0028	100.0	99.03	ug/L	-1	10	
Barium	A	9.0E-4	7.5E-4	100.0	92.98	ug/L	-7	10	
Beryllium	A	0.0030	0.0027	100.0	92.86	ug/L	-7	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	95.47	ug/L	-5	10	
Calcium	A	3.6E-4	1.8E-4	10000	9631	ug/L	-4	10	
Lead	A	0.0082	0.0053	100.0	99.65	ug/L	0	10	
Magnesium	A	0.0036	0.0031	10000	9580	ug/L	-4	10	
Potassium	A	0.0224	0.0058	10000	9907	ug/L	-1	10	
Silver	A	0.0037	0.0035	100.0	102.2	ug/L	2	10	
Thallium	A	0.0076	0.0071	50.00	48.11	ug/L	-4	10	
Arsenic	E	0.0065	0.0058	100.0	99.63	ug/L	0	10	
Chromium	E	0.0774	0.0454	100.0	98.03	ug/L	-2	10	
Manganese	E	0.0182	0.0148	100.0	95.94	ug/L	-4	10	
Nickel	E	0.0315	0.0253	100.0	98.92	ug/L	-1	10	
Sodium	E	0.0103	0.0041	10000	9858	ug/L	-1	10	
Zinc	E	0.0356	0.0091	100.0	96.70	ug/L	-3	10	
Iron	H	0.0091	0.0078	10000	9816	ug/L	-2	10	
Selenium	H	0.0011	0.0011	100.0	98.79	ug/L	-1	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1229576	-13.79
Scandium	A	4202107	3945454	-6.11
Scandium	E	35507	34444	-2.99
Scandium	H	1106706	1009302	-8.80
Germanium	H	302030	274927	-8.97
Germanium	E	28812	28414	-1.38
Indium	A	5178122	4931445	-4.76
Bismuth	A	3644746	3645550	0.02
Yttrium	A	5969850	5740356	-3.84
Terbium	A	6509046	6414958	-1.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324111 File : 09i22m00111 Time : 23-SEP-2009 06:35
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03450]	0.05000	0.01103	ug/L	!ib
Arsenic	E	[0.05690]	0.1000	0.04565	ug/L	!ib
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[2.304]	10.00	0.8425	ug/L	!ib
Selenium	H	[0.06950]	0.1000	0.06175	ug/L	!ib

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1280800	-10.19
Scandium	A	4202107	3968879	-5.55
Scandium	E	35507	35069	-1.23
Scandium	H	1106706	1113851	0.65
Germanium	H	302030	299431	-0.86
Germanium	E	28812	28695	-0.41
Indium	A	5178122	5068785	-2.11
Bismuth	A	3644746	3718169	2.01
Yttrium	A	5969850	5780762	-3.17
Terbium	A	6509046	6462348	-0.72

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324121 File : 09i22m00121 Time : 23-SEP-2009 08:16
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0047	0.0042	10000	9755	ug/L	-2	10	
Antimony	A	0.0035	0.0029	100.0	100.5	ug/L	1	10	
Barium	A	9.0E-4	7.5E-4	100.0	93.27	ug/L	-7	10	
Beryllium	A	0.0030	0.0027	100.0	94.09	ug/L	-6	10	
Cadmium	A	7.3E-4	6.6E-4	100.0	96.45	ug/L	-4	10	
Calcium	A	3.6E-4	1.8E-4	10000	9781	ug/L	-2	10	
Lead	A	0.0082	0.0053	100.0	100.2	ug/L	0	10	
Magnesium	A	0.0036	0.0031	10000	9558	ug/L	-4	10	
Potassium	A	0.0224	0.0059	10000	9975	ug/L	0	10	
Silver	A	0.0037	0.0035	100.0	103.1	ug/L	3	10	
Thallium	A	0.0076	0.0072	50.00	49.20	ug/L	-2	10	
Arsenic	E	0.0065	0.0059	100.0	100.4	ug/L	0	10	
Chromium	E	0.0774	0.0459	100.0	99.18	ug/L	-1	10	
Manganese	E	0.0182	0.0150	100.0	96.76	ug/L	-3	10	
Nickel	E	0.0315	0.0256	100.0	100.1	ug/L	0	10	
Sodium	E	0.0103	0.0041	10000	9874	ug/L	-1	10	
Zinc	E	0.0356	0.0092	100.0	97.97	ug/L	-2	10	
Iron	H	0.0091	0.0078	10000	9783	ug/L	-2	10	
Selenium	H	0.0011	0.0011	100.0	99.70	ug/L	0	10	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1194850	-16.22
Scandium	A	4202107	3925713	-6.58
Scandium	E	35507	34006	-4.23
Scandium	H	1106706	1001998	-9.46
Germanium	H	302030	272587	-9.75
Germanium	E	28812	28053	-2.63
Indium	A	5178122	4921501	-4.96
Bismuth	A	3644746	3632458	-0.34
Yttrium	A	5969850	5739930	-3.85
Terbium	A	6509046	6442890	-1.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324124 File : 09i22m00124 Time : 23-SEP-2009 08:46
Cal : 1019382324001 Caldate : 22-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.01780]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[2.375]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1253777	-12.09
Scandium	A	4202107	3970312	-5.52
Scandium	E	35507	36450	2.66
Scandium	H	1106706	1018226	-7.99
Germanium	H	302030	280576	-7.10
Germanium	E	28812	29422	2.12
Indium	A	5178122	5051246	-2.45
Bismuth	A	3644746	3723588	2.16
Yttrium	A	5969850	5794642	-2.93
Terbium	A	6509046	6428234	-1.24

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324125 File : 09i22m00125 Time : 23-SEP-2009 08:58
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2862	0.1000	ug/L	!a+
Barium	A	1.379	0.1000	ug/L	!a+
Beryllium	A	[0.02470]	0.1000	ug/L	
Cadmium	A	2.893	0.1000	ug/L	!a+
Lead	A	1.249	0.1000	ug/L	!a+
Silver	A	0.1702	0.1000	ug/L	!a+
Thallium	A	0.08020	0.05000	ug/L	!a+
Arsenic	E	0.3493	0.1000	ug/L	!a+
Chromium	E	1.048	0.1000	ug/L	!a+
Manganese	E	6.349	0.1000	ug/L	!a+
Nickel	E	3.700	0.1000	ug/L	!a+
Zinc	E	6.391	0.1000	ug/L	!a+
Selenium	H	0.2152	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	101700	ug/L	102
Calcium	A	300000	309800	ug/L	103
Magnesium	A	100000	97340	ug/L	97
Molybdenum	A	2000	1980	ug/L	99
Potassium	A	100000	103900	ug/L	104
Sodium	E	250000	244700	ug/L	98
Iron	H	250000	248900	ug/L	100

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1426200	1025341	-28.11
Scandium	A	4202107	3891478	-7.39
Scandium	E	35507	35408	-0.28
Scandium	H	1106706	1002899	-9.38
Germanium	H	302030	264253	-12.51
Germanium	E	28812	28774	-0.13
Indium	A	5178122	4446705	-14.13
Bismuth	A	3644746	2971566	-18.47
Yttrium	A	5969850	5568037	-6.73
Terbium	A	6509046	5939299	-8.75

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 214924 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019382324126 File : 09i22m00126 Time : 23-SEP-2009 09:09
Cal : 1019382324001 Caldate : 22-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104500	ug/L	5		
Cadmium	A	100.0	106.4	ug/L	6	20	
Calcium	A	300000	318400	ug/L	6		
Magnesium	A	100000	100700	ug/L	1		
Potassium	A	100000	106500	ug/L	7		
Silver	A	50.00	52.94	ug/L	6	20	
Arsenic	E	100.0	109.6	ug/L	10	20	
Chromium	E	200.0	208.3	ug/L	4	20	
Manganese	E	200.0	210.6	ug/L	5	20	
Nickel	E	200.0	195.2	ug/L	-2	20	
Sodium	E	250000	252700	ug/L	1		
Zinc	E	100.0	96.59	ug/L	-3	20	
Iron	H	250000	255500	ug/L	2		
Selenium	H	100.0	107.9	ug/L	8	20	

ISTD (ICALBLK 09i22m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1106706	989505	-10.59
Scandium	A	4202107	3839258	-8.63
Scandium	E	35507	34874	-1.78
Germanium	H	302030	262831	-12.98
Germanium	E	28812	28331	-1.67
Indium	A	5178122	4384688	-15.32
Yttrium	A	5969850	5504487	-7.80

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 99390747

Instrument : MET09 Begun : 09/28/09 08:27
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met09_sn_6010a	ICALBLK				09/28/09 08:27	1.0		
002	met09_sn_6010a	ICAL	CRIM08			09/28/09 08:32	1.0	1	
003	met09_sn_6010a	ICAL	CRI3			09/28/09 08:37	1.0	2	
004	met09_sn_6010a	ICAL	CS100			09/28/09 08:42	1.0	3	
005	met09_sn_6010a	ICAL	CS1K			09/28/09 08:46	1.0	4	
006	met09_sn_6010a	ICAL	CS10K			09/28/09 08:50	1.0	5	
007	met09_sn_6010a	ICAL	CS100K			09/28/09 08:55	1.0	6	
008	met09_sn_6010a	ICV				09/28/09 09:00	1.0	7	
009	met09_sn_6010a	X				09/28/09 09:05	1.0		
010	met09_sn_6010a	ICB				09/28/09 09:09	1.0		
011	met09_sn_6010a	X				09/28/09 09:14	1.0	8	
012	met09_sn_6010a	X				09/28/09 09:20	1.0	8	
013	met09_sn_6010a	ICSA				09/28/09 09:28	1.0	8	10:AL=500000
014	met09_sn_6010a	X				09/28/09 09:38	1.0	9	
015	met09_sn_6010a	ICSAB				09/28/09 09:42	1.0	9	5:AL=480000
016	met09_sn_6010a	SAMPLE	215095-004	Soil	155234	09/28/09 09:47	1.0		4:FE=540000
017	met09_sn_6010a	SAMPLE	215096-001	Soil	155234	09/28/09 09:51	1.0		3:FE=600000
018	met09_sn_6010a	SAMPLE	215096-003	Soil	155234	09/28/09 09:55	1.0		6:FE=630000
019	met09_sn_6010a	SAMPLE	215096-004	Soil	155234	09/28/09 10:01	1.0		6:FE=560000
020	met09_sn_6010a	SAMPLE	215096-006	Soil	155234	09/28/09 10:07	1.0		4:FE=510000
021	met09_sn_6010a	SAMPLE	215096-007	Soil	155234	09/28/09 10:10	1.0		5:FE=560000
022	met09_sn_6010a	SAMPLE	215096-008	Soil	155234	09/28/09 10:16	1.0		4:FE=500000
023	met09_sn_6010a	SAMPLE	215096-009	Soil	155234	09/28/09 10:22	1.0		6:FE=600000
024	met09_sn_6010a	CCV				09/28/09 10:28	1.0	10	
025	met09_sn_6010a	CCB				09/28/09 10:33	1.0		
026	met09_sn_6010a	SAMPLE	215096-010	Soil	155234	09/28/09 10:39	1.0		5:FE=570000
027	met09_sn_6010a	SAMPLE	215096-011	Soil	155234	09/28/09 10:45	1.0		11:FE=910000
028	met09_sn_6010a	SAMPLE	215096-012	Soil	155234	09/28/09 10:51	1.0		4:FE=660000
029	met09_sn_6010a	SAMPLE	215096-013	Soil	155234	09/28/09 10:55	1.0		5:FE=690000
030	met09_sn_6010a	SAMPLE	215096-006	Soil	155234	09/28/09 11:01	20.0		
031	met09_sn_6010a	SAMPLE	215096-007	Soil	155234	09/28/09 11:05	20.0		
032	met09_sn_6010a	SAMPLE	215096-008	Soil	155234	09/28/09 11:10	20.0		
033	met09_sn_6010a	SAMPLE	215096-009	Soil	155234	09/28/09 11:14	20.0		
034	met09_sn_6010a	SAMPLE	215096-010	Soil	155234	09/28/09 11:19	20.0		
035	met09_sn_6010a	SAMPLE	215096-011	Soil	155234	09/28/09 11:24	20.0		
036	met09_sn_6010a	X				09/28/09 11:28	1.0	10	
037	met09_sn_6010a	X				09/28/09 11:30	1.0	10	
038	met09_sn_6010a	CCV				09/28/09 11:34	1.0	10	
039	met09_sn_6010a	CCB				09/28/09 11:40	1.0		
040	met09_sn_6010a	SAMPLE	215096-012	Soil	155234	09/28/09 11:45	20.0		
041	met09_sn_6010a	SAMPLE	215096-013	Soil	155234	09/28/09 11:50	20.0		
042	met09_sn_6010a	SAMPLE	214935-001	Water	155037	09/28/09 11:55	20.0		
043	met09_sn_6010a	SAMPLE	214935-002	Water	155037	09/28/09 12:00	20.0		
044	met09_sn_6010a	SAMPLE	214993-004	Miscell.	155095	09/28/09 12:06	1.0		1:K=150000
045	met09_sn_6010a	SAMPLE	214994-001	Soil	155095	09/28/09 12:14	1.0		3:FE=460000
046	met09_sn_6010a	ICSAB				09/28/09 12:18	1.0	9	5:AL=480000
047	met09_sn_6010a	X	RINSE			09/28/09 12:23	1.0		
048	met09_sn_6010a	BLANK	QC512570	Water	155040	09/28/09 12:29	1.0		
049	met09_sn_6010a	BS	QC512571	Water	155040	09/28/09 12:34	1.0		
050	met09_sn_6010a	X				09/28/09 12:39	1.0	10	
051	met09_sn_6010a	CCV				09/28/09 12:41	1.0	10	
052	met09_sn_6010a	CCB				09/28/09 12:47	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 99390747

Instrument : MET09 Begun : 09/28/09 08:27
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met09_sn_6010a	BSD	QC512572	Water	155040	09/28/09 12:52	1.0		
054	met09_sn_6010a	MSS	214809-001	Water	155040	09/28/09 12:57	1.0		
055	met09_sn_6010a	MS	QC512573	Water	155040	09/28/09 13:03	1.0		
056	met09_sn_6010a	MSD	QC512574	Water	155040	09/28/09 13:07	1.0		
057	met09_sn_6010a	SER	QC512575	Water	155040	09/28/09 13:12	5.0		
058	met09_sn_6010a	PDS	QC512576	Water	155040	09/28/09 13:18	1.0	11 12	
059	met09_sn_6010a	SAMPLE	214922-003	Water	155040	09/28/09 13:22	1.0		1:NA=210000
060	met09_sn_6010a	SAMPLE	214922-004	Water	155040	09/28/09 13:29	1.0		1:NA=270000
061	met09_sn_6010a	SAMPLE	214924-002	Water	155040	09/28/09 13:37	1.0		1:NA=190000
062	met09_sn_6010a	SAMPLE	214924-003	Water	155040	09/28/09 13:44	1.0		1:NA=260000
063	met09_sn_6010a	CCV				09/28/09 13:52	1.0	10	
064	met09_sn_6010a	CCB				09/28/09 13:58	1.0		
065	met09_sn_6010a	SAMPLE	214924-004	Water	155040	09/28/09 14:04	1.0		1:NA=250000
066	met09_sn_6010a	SAMPLE	214924-005	Water	155040	09/28/09 14:11	1.0		1:NA=260000
067	met09_sn_6010a	SAMPLE	214924-006	Water	155040	09/28/09 14:19	1.0		1:NA=280000
068	met09_sn_6010a	SAMPLE	214924-007	Water	155040	09/28/09 14:27	1.0		1:NA=280000
069	met09_sn_6010a	SAMPLE	214924-009	Water	155040	09/28/09 14:34	1.0		1:NA=220000
070	met09_sn_6010a	SAMPLE	214922-006	Water	155149	09/28/09 14:42	1.0		1:NA=240000
071	met09_sn_6010a	ICSAB				09/28/09 14:50	1.0	9	5:AL=480000
072	met09_sn_6010a	CCV				09/28/09 14:54	1.0	10	
073	met09_sn_6010a	CCB				09/28/09 15:01	1.0		
074	met09_sn_6010a	BLANK	QC513895	Wipe	155365	09/28/09 15:08	1.0		

AH 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 73.

Standards used: 1=S12500 2=S12732 3=S12797 4=S12796 5=S12795 6=S12798 7=S12881 8=S12810 9=S12730 10=S12882 11=S9267 12=S9268

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 99390747

Date : 09/28/09 Reference : met09_sn_6010a
Sequence : MET09 09/28/09 Analyzed : 09/28/09 08:32

#	Type	Sample ID	Y A
		ICAL STD	4790227
		LOWER LIMIT	1437068
		UPPER LIMIT	9580453
010	ICB		4733384
013	ICSA		3945405
015	ICSAB		3958268
016	SAMPLE	215095-004	4583228
017	SAMPLE	215096-001	4534028
018	SAMPLE	215096-003	4524813
019	SAMPLE	215096-004	4384675
020	SAMPLE	215096-006	4393561
021	SAMPLE	215096-007	4538551
022	SAMPLE	215096-008	4539817
023	SAMPLE	215096-009	4398225
024	CCV		4573295
025	CCB		4609626
026	SAMPLE	215096-010	4398853
027	SAMPLE	215096-011	4377888
028	SAMPLE	215096-012	4432318
029	SAMPLE	215096-013	4466558
030	SAMPLE	215096-006	4725275
031	SAMPLE	215096-007	4672256
032	SAMPLE	215096-008	4589741
033	SAMPLE	215096-009	4640308
034	SAMPLE	215096-010	4696692
035	SAMPLE	215096-011	4627213
038	CCV		4448569
039	CCB		4709892
040	SAMPLE	215096-012	4649774
041	SAMPLE	215096-013	4550245
044	SAMPLE	214993-004	4425138
045	SAMPLE	214994-001	4448447
046	ICSAB		3922131
048	BLANK	QC512570	4723135
049	BS	QC512571	4676182
051	CCV		4542127
052	CCB		4712308
053	BSD	QC512572	4646251
054	MSS	214809-001	4641342
055	MS	QC512573	4658226
056	MSD	QC512574	4423953
057	SER	QC512575	4637975
058	PDS	QC512576	4585907
059	SAMPLE	214922-003	4358165
060	SAMPLE	214922-004	4294358
061	SAMPLE	214924-002	4353320
062	SAMPLE	214924-003	4291503
063	CCV		4512593
064	CCB		4662654
065	SAMPLE	214924-004	4319377
066	SAMPLE	214924-005	4362377

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 99390747

Date : 09/28/09 Reference : met09_sn_6010a
Sequence : MET09 09/28/09 Analyzed : 09/28/09 08:32

#	Type	Sample ID	Y A
067	SAMPLE	214924-006	4333207
068	SAMPLE	214924-007	4290054
069	SAMPLE	214924-009	4355729
070	SAMPLE	214922-006	4290696
071	ICSAB		3907137
072	CCV		4498687
073	CCB		4781602

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 METALS Water: EPA 6010B

Inst : MET09 Reviewer : ---
Calnum : 99390747001 Date : 28-SEP-2009 08:27
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met09_sn_6010a	99390747002	CRIM08	28-SEP-2009 08:32	S12500
L2	met09_sn_6010a	99390747003	CRI3	28-SEP-2009 08:37	S12732
L3	met09_sn_6010a	99390747004	CS100	28-SEP-2009 08:42	S12797
L4	met09_sn_6010a	99390747005	CS1K	28-SEP-2009 08:46	S12796
L5	met09_sn_6010a	99390747006	CS10K	28-SEP-2009 08:50	S12795
L6	met09_sn_6010a	99390747007	CS100K	28-SEP-2009 08:55	S12798

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	15.740	19.423	18.710	19.394	19.862		LOR0	0.00000	0.05036		18.626	1.000	0.995	
Arsenic	A	11.480	10.300	10.064	10.300	9.9705		LOR0	0.00000	0.10026		10.423	1.000	0.995	
Barium	A	96.940	96.380	98.242	100.13	97.821		LOR0	0.00000	0.01022		97.903	1.000	0.995	
Boron	A	143.30	143.78		146.79	151.88		LOR0	0.00000	0.00659		146.44	1.000	0.995	
Cadmium	A	158.16	166.93	184.08	188.37	179.98		LOR0	0.00000	0.00555		175.51	1.000	0.995	
Lead	A	10.700	22.367	32.240	34.520	34.231		LOR0	0.00000	0.02921		26.811	1.000	0.995	
Manganese	A	272.26	359.98	402.69	412.41	392.88		LOR0	0.00000	0.00254		368.04	1.000	0.995	
Nickel	A	70.800	89.633	103.72	109.12	107.24		LOR0	0.00000	0.00932		96.102	1.000	0.995	
Selenium	A	13.570	14.357	15.025	15.003	15.614		LOR0	0.00000	0.06407		14.714	1.000	0.995	
Silver	A	433.78	445.49	474.05	485.43	482.55		LOR0	0.00000	0.00207		464.26	1.000	0.995	
Thallium	A	10.060	9.8633	10.255	10.528	10.533		LOR0	0.00000	0.09494		10.248	1.000	0.995	
Zinc	A	80.745	82.723	86.437	89.976	89.619		LOR0	0.00000	0.01116		85.900	1.000	0.995	
Aluminum	R	0.3750	0.6080		0.7200	0.7227	0.7191	LOR0	0.00000	1.39054		0.6290	1.000	0.995	
Calcium	R	6.3220	7.0923		7.3953	7.4431	7.4003	LOR0	0.00000	0.13512		7.1306	1.000	0.995	
Iron	R	3.1960	3.7590		4.0095	4.0117	3.8602	LOR0	0.00000	0.25895		3.7673	1.000	0.995	
Magnesium	R	0.9520	1.1143		1.1723	1.1766	1.1377	LOR0	0.00000	0.87867		1.1106	1.000	0.995	
Potassium	R	4.1456			4.2040	4.1579	4.2724	LOR0	0.00000	0.23413		4.1950	1.000	0.995	
Sodium	R	210.92			199.57	220.61	221.91	LOR0	0.00000	0.00451		213.25	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Antimony	A	10.00	-21	30.00	-2	100.0	-6	1000	-2	10000	0		
Arsenic	A	5.000	15	15.00	3	100.0	1	1000	3	10000	0		
Barium	A	5.000	-1	15.00	-1	100.0	0	1000	2	10000	0		
Boron	A	100.0	-6	300.0	-5			1000	-3	10000	0		
Cadmium	A	5.000	-12	15.00	-7	100.0	2	1000	5	10000	0		
Lead	A	3.000	-69	9.000	-35	100.0	-6	1000	1	10000	0		
Manganese	A	5.000	-31	15.00	-8	100.0	2	1000	5	10000	0		
Nickel	A	5.000	-34	15.00	-16	100.0	-3	1000	2	10000	0		
Selenium	A	10.00	-13	30.00	-8	100.0	-4	1000	-4	10000	0		
Silver	A	5.000	-10	15.00	-8	100.0	-2	1000	0	2000	0		
Thallium	A	10.00	-4	30.00	-6	100.0	-3	1000	0	10000	0		
Zinc	A	20.00	-10	60.00	-8	100.0	-4	1000	0	10000	0		
Aluminum	R	100.0	-48	300.0	-15			1000	0	10000	0	1E+5	0
Calcium	R	200.0	-15	600.0	-4			1000	0	10000	1	1E+5	0
Iron	R	100.0	-17	300.0	-3			1000	4	10000	4	1E+5	0
Magnesium	R	200.0	-16	600.0	-2			1000	3	10000	3	1E+5	0
Potassium	R	500.0	-3					1000	-2	10000	-3	1E+5	0
Sodium	R	500.0	-5					1000	-10	10000	-1	1E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 METALS Water
EPA 6010B

Inst : MET09
Calnum : 99390747001 Cal Date : 28-SEP-2009

ICV 99390747008 (28-SEP-2009) stds: S12881

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	5000	4903	ug/L	-2	10	
Arsenic	A	5000	5156	ug/L	3	10	
Barium	A	5000	5109	ug/L	2	10	
Boron	A	5000	5073	ug/L	1	10	
Cadmium	A	5000	5148	ug/L	3	10	
Lead	A	5000	4945	ug/L	-1	10	
Manganese	A	5000	4899	ug/L	-2	10	
Nickel	A	5000	4984	ug/L	0	10	
Selenium	A	5000	4939	ug/L	-1	10	
Silver	A	1000	948.9	ug/L	-5	10	
Thallium	A	5000	4867	ug/L	-3	10	
Zinc	A	5000	5028	ug/L	1	10	
Aluminum	R	20000	20370	ug/L	2	10	
Calcium	R	20000	20550	ug/L	3	10	
Iron	R	20000	20890	ug/L	4	10	
Magnesium	R	20000	20660	ug/L	3	10	
Potassium	R	20000	20210	ug/L	1	10	
Sodium	R	20000	20350	ug/L	2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747010.1 File : met09_sn_6010a Time : 28-SEP-2009 09:09
Cal : 99390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	[3.185]	5.000	3.155	ug/L	!ib
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	ND	3.000	1.212	ug/L	
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4733384	-1.19

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747013.1 File : met09_sn_6010a Time : 28-SEP-2009 09:28
Cal : 99390747001 Caldate : 28-SEP-2009
Standards: S12810

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	[6.276]	10.00	ug/L	!a+
Arsenic	A	[-0.5536]	5.000	ug/L	
Barium	A	[-0.9163]	5.000	ug/L	
Boron	A	[-121.4]	100.0	ug/L	!a-
Cadmium	A	[0.6813]	5.000	ug/L	
Lead	A	[1.327]	3.000	ug/L	!a+
Selenium	A	[4.842]	10.00	ug/L	
Silver	A	[1.035]	5.000	ug/L	
Thallium	A	[-6.946]	10.00	ug/L	!a-
Zinc	A	[-3.017]	20.00	ug/L	
Potassium	R	[88.23]	500.0	ug/L	
Sodium	R	[-103.5]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	18870	ug/L	94
Copper	A	20000	20070	ug/L	100
Manganese	A	20000	17490	ug/L	87
Nickel	A	20000	17090	ug/L	85
Vanadium	A	20000	20190	ug/L	101
Aluminum	R	500000	501300	ug/L	100
Calcium	R	500000	485600	ug/L	97
Iron	R	200000	196100	ug/L	98
Magnesium	R	500000	494300	ug/L	99
Titanium	R	20000	21540	ug/L	108

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	3945405	-17.64

!=warning +=high bias -=low bias a=ICSA

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747038.1 File : met09_sn_6010a Time : 28-SEP-2009 11:34
Cal : 99390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	18.626	18.912	5000	4762	ug/L	-5	10	
Arsenic	A	10.423	10.096	5000	5061	ug/L	1	10	
Barium	A	97.903	99.811	5000	5101	ug/L	2	10	
Boron	A	146.44	155.72	5000	5129	ug/L	3	10	
Cadmium	A	175.51	186.65	5000	5183	ug/L	4	10	
Lead	A	26.811	37.679	5000	5503	ug/L	10	10	
Manganese	A	368.04	356.56	5000	4536	ug/L	-9	10	
Nickel	A	96.102	105.34	5000	4911	ug/L	-2	10	
Selenium	A	14.714	14.604	5000	4678	ug/L	-6	10	
Silver	A	464.26	510.86	1000	1057	ug/L	6	10	
Thallium	A	10.248	10.252	5000	4867	ug/L	-3	10	
Zinc	A	85.900	90.002	5000	5021	ug/L	0	10	
Aluminum	R	0.6290	0.7143	20000	19870	ug/L	-1	10	
Calcium	R	7.1306	7.4214	20000	20060	ug/L	0	10	
Iron	R	3.7673	4.0973	20000	21220	ug/L	6	10	
Magnesium	R	1.1106	1.1137	20000	19570	ug/L	-2	10	
Potassium	R	4.1950	4.2593	20000	19940	ug/L	0	10	
Sodium	R	213.25	219.76	20000	19810	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4448569	-7.13

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747039.1 File : met09_sn_6010a Time : 28-SEP-2009 11:40
Cal : 99390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	[3.429]	5.000	3.155	ug/L	!ib
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	[59.08]	100.0	55.93	ug/L	!ib
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	ND	3.000	1.212	ug/L	
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4709892	-1.68

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747051.2 File : met09_sn_6010a Time : 28-SEP-2009 12:41
Cal : 99390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	18.626	18.580	5000	4679	ug/L	-6	10	
Arsenic	A	10.423	9.9660	5000	4996	ug/L	0	10	
Barium	A	97.903	98.552	5000	5036	ug/L	1	10	
Boron	A	146.44	157.04	5000	5172	ug/L	3	10	
Cadmium	A	175.51	184.70	5000	5129	ug/L	3	10	
Lead	A	26.811	36.796	5000	5374	ug/L	7	10	
Manganese	A	368.04	355.59	5000	4523	ug/L	-10	10	
Nickel	A	96.102	104.45	5000	4869	ug/L	-3	10	
Selenium	A	14.714	14.543	5000	4659	ug/L	-7	10	
Silver	A	464.26	507.54	1000	1051	ug/L	5	10	
Thallium	A	10.248	10.048	5000	4770	ug/L	-5	10	
Zinc	A	85.900	89.237	5000	4979	ug/L	0	10	
Aluminum	R	0.6290	0.7077	20000	19680	ug/L	-2	10	
Calcium	R	7.1306	7.4341	20000	20090	ug/L	0	10	
Iron	R	3.7673	4.0694	20000	21080	ug/L	5	10	
Magnesium	R	1.1106	1.1100	20000	19510	ug/L	-2	10	
Potassium	R	4.1950	4.2500	20000	19900	ug/L	0	10	
Sodium	R	213.25	220.32	20000	19860	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4542127	-5.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747052.2 File : met09_sn_6010a Time : 28-SEP-2009 12:47
Cal : 99390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	[3.534]	5.000	3.155	ug/L	!ib
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	ND	3.000	1.212	ug/L	
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4712308	-1.63

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747063.1 File : met09_sn_6010a Time : 28-SEP-2009 13:52
Cal : 99390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	18.626	18.563	5000	4674	ug/L	-7	10	
Arsenic	A	10.423	9.8719	5000	4949	ug/L	-1	10	
Barium	A	97.903	97.705	5000	4993	ug/L	0	10	
Boron	A	146.44	152.82	5000	5033	ug/L	1	10	
Cadmium	A	175.51	182.44	5000	5066	ug/L	1	10	
Lead	A	26.811	34.697	5000	5068	ug/L	1	10	
Manganese	A	368.04	360.67	5000	4588	ug/L	-8	10	
Nickel	A	96.102	104.23	5000	4859	ug/L	-3	10	
Selenium	A	14.714	14.571	5000	4668	ug/L	-7	10	
Silver	A	464.26	496.13	1000	1027	ug/L	3	10	
Thallium	A	10.248	9.9027	5000	4701	ug/L	-6	10	
Zinc	A	85.900	88.193	5000	4920	ug/L	-2	10	
Aluminum	R	0.6290	0.7038	20000	19570	ug/L	-2	10	
Calcium	R	7.1306	7.4360	20000	20100	ug/L	0	10	
Iron	R	3.7673	3.9523	20000	20470	ug/L	2	10	
Magnesium	R	1.1106	1.1204	20000	19690	ug/L	-2	10	
Potassium	R	4.1950	4.1994	20000	19660	ug/L	-2	10	
Sodium	R	213.25	217.50	20000	19600	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4512593	-5.80

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747064.1 File : met09_sn_6010a Time : 28-SEP-2009 13:58
Cal : 99390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	[4.953]	5.000	3.155	ug/L	!ib
Barium	A	[2.706]	5.000	2.438	ug/L	!ib
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	ND	3.000	1.212	ug/L	
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4662654	-2.66

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747072.1 File : met09_sn_6010a Time : 28-SEP-2009 14:54
Cal : 99390747001 Caldate : 28-SEP-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	18.626	18.914	5000	4763	ug/L	-5	10	
Arsenic	A	10.423	10.043	5000	5035	ug/L	1	10	
Barium	A	97.903	98.672	5000	5042	ug/L	1	10	
Boron	A	146.44	154.66	5000	5093	ug/L	2	10	
Cadmium	A	175.51	182.64	5000	5072	ug/L	1	10	
Lead	A	26.811	34.659	5000	5062	ug/L	1	10	
Manganese	A	368.04	372.66	5000	4740	ug/L	-5	10	
Nickel	A	96.102	105.19	5000	4904	ug/L	-2	10	
Selenium	A	14.714	14.876	5000	4765	ug/L	-5	10	
Silver	A	464.26	490.01	1000	1014	ug/L	1	10	
Thallium	A	10.248	10.119	5000	4804	ug/L	-4	10	
Zinc	A	85.900	88.490	5000	4937	ug/L	-1	10	
Aluminum	R	0.6290	0.7460	20000	20750	ug/L	4	10	
Calcium	R	7.1306	7.5175	20000	20320	ug/L	2	10	
Iron	R	3.7673	4.1320	20000	21400	ug/L	7	10	
Magnesium	R	1.1106	1.1646	20000	20470	ug/L	2	10	
Potassium	R	4.1950	4.3158	20000	20210	ug/L	1	10	
Sodium	R	213.25	220.06	20000	19830	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4498687	-6.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99390747073.1 File : met09_sn_6010a Time : 28-SEP-2009 15:01
Cal : 99390747001 Caldate : 28-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	ND	5.000	3.155	ug/L	
Barium	A	[2.900]	5.000	2.438	ug/L	!ib
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	ND	3.000	1.212	ug/L	
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4790227	4781602	-0.18

!=warning ib=instrument blank

SAMPLE PREPARATION SUMMARY

Batch # : 155040
Started By : VV
Method : 200.8
Spike #1 ID : S12256

Prep Date : 17-SEP-2009 09:00
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214809-001		Water	50	50	1	1.0						TAL/ICP	
214809-002		Water	50	50	1	1.0						TAL/ICP	
214809-004		Water	50	50	1	1.0						TAL/ICP	
214865-001		Water	50	50	1	1.0						TAL/ICP	
214919-001		Water	50	50	1	1.0						CU, SE	
214919-003		Water	50	50	1	1.0						CU, SE	
214922-003		Water	50	50	1	1.0						TAL/ICP	
214922-004		Water	50	50	1	1.0						TAL/ICP	
214922-005		Water	50	50	1	1.0						(rebatched)	
214922-006		Water	50	50	1	1.0						(rebatched)	
214924-002		Water	50	50	1	1.0						TAL/ICP	
214924-003		Water	50	50	1	1.0						TAL/ICP	
214924-004		Water	50	50	1	1.0						TAL/ICP	
214924-005		Water	50	50	1	1.0						TAL/ICP	
214924-006		Water	50	50	1	1.0						TAL/ICP	
214924-007		Water	50	50	1	1.0						TAL/ICP	
214924-009		Water	50	50	1	1.0						TAL/ICP	
214940-002		Water	50	50	1	1.0						HARDNESS, TAL/ICP	
214940-003		Water	50	50	1	1.0						HARDNESS, TAL/ICP	
214940-004		Water	50	50	1	1.0						HARDNESS, TAL/ICP	
214947-001		Water	50	50	1	1.0						AG, AS, BE, CD, CR, CU, NI, PB, SB, SE, TL, ZN	
214947-002		Water	50	50	1	1.0						AG, AS, BE, CD, CR, CU, NI, PB, SB, SE, TL, ZN	
QC512570	BLANK	Water	50	50	1	1.0							
QC512571	BS	Water	50	50	1	1.0		.25	.25				
QC512572	BSD	Water	50	50	1	1.0		.25	.25				
QC512573	MS	Water	50	50	1	1.0		.25	.25				
QC512574	MSD	Water	50	50	1	1.0		.25	.25				
QC512575	SER	Water	50	50	1	1.0							
QC512576	PDS	Water	50	50	1	1.0							
QC512577	MS	Water	50	50	1	1.0		.25	.25				
QC512578	MSD	Water	50	50	1	1.0		.25	.25				

Reviewed by: JYF Date: 09/22/09

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 155040
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	QC	50	50	N	
* BS	↓	↓	↓	↓	
* BSD	↓	↓	↓	↓	
* 214809-001 MS	I				
* - 001 MSD	↓				
VV #1 - 001	↓				
* - 002 MS	A				
* - 002 MSD	↓				
- 002	↓				
10 - 004	A				
214865-001	E				
214919-001	A				
↓ - 003	D				
214922-003	G				
15 - 004	F				
~~- 005~~	~~E~~				NOT USED JVF 9/22
~~- 006~~	~~↓~~				
214924-002	G				
- 003	F				
20 - 004	↓				
- 005	E				
- 006	↓				
- 007	F				
- 009	G				
214940-002	I				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J79714-261	
0.25 mL of spike solution (Std1) was added to all spikes	S12256 *	VV 9-17-09
0.25 mL of spike solution (Std2) was added to all spikes	S12257 *	↓
digestion temperature (90-95 degrees C)	95°C	
digestion begun at (time)	1PM	
concentrated HCl	H19031 - JT Baker	
concentrated HNO3	H12072 - JT Baker	
digestion ended at (time)	7PM	
☐ filtered thru' Whatman # 541	—	
Relinquished to ICP group		

Prep Chemist / Date: 9-17-09

Continued from page 0
Continued on page 86

Reviewed by / Date: 9/21/09

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 155040
Digested by: VV
Date Digested: 9-17-09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
214940-003	H	50	50	n	
↓ -004	I	↓	↓	↓	
214947-001	L				
↓ -002	N				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J71714-261	
___ mL of spike solution (Std1) was added to all spikes	—	VV 9-17-09
___ mL of spike solution (Std2) was added to all spikes	—	
digestion temperature (90-95 degrees C)	95°C	
digestion begun at (time)	1PM	
concentrated HCl	H19031- JT Baker	
concentrated HNO3	H12022- JT Baker	
digestion ended at (time)	7PM	
☐ filtered thru' Whatman # 541	—	
Relinquished to ICP group		

9-17-09
Prep Chemist / Date

Continued from page 85
Continued on page 0

9/01/09
Reviewed by / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 49375075

Instrument : MET04 Begun : 09/17/09 11:15
Method : EPA 7470A SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	154984	ICALBLK	STD01REP1			09/17/09 11:15	1.0		
002	154984	ICAL	STD02REP1			09/17/09 11:17	1.0	1	
003	154984	ICAL	STD03REP1			09/17/09 11:20	1.0	1	
004	154984	ICAL	STD04REP1			09/17/09 11:22	1.0	1	
005	154984	ICAL	STD05REP1			09/17/09 11:24	1.0	1	
006	154984	ICAL	STD06REP1			09/17/09 11:27	1.0	1	
007	154984	ICV				09/17/09 11:30	1.0	2	
008	154984	ICB				09/17/09 11:33	1.0		
009	154984	BLANK	QC512341	Water	154984	09/17/09 11:36	1.0		
010	154984	BS	QC512342	Water	154984	09/17/09 11:38	1.0		
011	154984	BSD	QC512343	Water	154984	09/17/09 11:40	1.0		
012	154984	MSS	214921-001	Water	154984	09/17/09 11:44	1.0		
013	154984	MS	QC512344	Water	154984	09/17/09 11:46	1.0		
014	154984	MSD	QC512345	Water	154984	09/17/09 11:48	1.0		
015	154984	SER	QC512346	Water	154984	09/17/09 11:51	5.0		
016	154984	SAMPLE	214884-003	Water	154984	09/17/09 11:53	1.0		
017	154984	SAMPLE	214884-007	Water	154984	09/17/09 11:55	1.0		
018	154984	SAMPLE	214901-008	Water	154984	09/17/09 11:57	1.0		
019	154984	CCV				09/17/09 12:00	1.0	3	
020	154984	CCB				09/17/09 12:02	1.0		
021	154984	SAMPLE	214901-009	Water	154984	09/17/09 12:04	1.0		
022	154984	SAMPLE	214901-010	Water	154984	09/17/09 12:06	1.0		
023	154984	SAMPLE	214903-001	Filtrate	154984	09/17/09 12:08	1.0		
024	154984	SAMPLE	214924-002	Water	154984	09/17/09 12:10	1.0		
025	154984	SAMPLE	214924-003	Water	154984	09/17/09 12:13	1.0		
026	154984	SAMPLE	214924-004	Water	154984	09/17/09 12:15	1.0		
027	154984	SAMPLE	214924-005	Water	154984	09/17/09 12:18	1.0		
028	154984	SAMPLE	214924-006	Water	154984	09/17/09 12:20	1.0		
029	154984	SAMPLE	214924-007	Water	154984	09/17/09 12:22	1.0		
030	154984	SAMPLE	214924-009	Water	154984	09/17/09 12:24	1.0		
031	154984	CCV				09/17/09 12:27	1.0	3	
032	154984	CCB				09/17/09 12:29	1.0		
033	154984	SAMPLE	214928-001	Water	154984	09/17/09 12:31	1.0		
034	154984	SAMPLE	214940-002	Water	154984	09/17/09 12:33	1.0		
035	154984	SAMPLE	214940-003	Water	154984	09/17/09 12:36	1.0		
036	154984	SAMPLE	214940-004	Water	154984	09/17/09 12:38	1.0		
037	154984	CCV				09/17/09 12:41	1.0	3	
038	154984	CCB				09/17/09 12:44	1.0		

WNH 09/17/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12965 2=S12967 3=S12968

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 METALS Water: EPA 7470A

Inst : MET04
Calnum : 49375075001
Units : ug/L

Date : 17-SEP-2009 11:15
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	154984	49375075002	STD02REP1	17-SEP-2009 11:17	S12965 (500X)
L2	154984	49375075003	STD03REP1	17-SEP-2009 11:20	S12965 (200X)
L3	154984	49375075004	STD04REP1	17-SEP-2009 11:22	S12965 (50X)
L4	154984	49375075005	STD05REP1	17-SEP-2009 11:24	S12965 (20X)
L5	154984	49375075006	STD06REP1	17-SEP-2009 11:27	S12965 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	2700.0	2782.0	2672.5	2660.2	2482.6	LINR	-0.0993	4.01E-4		2659.5	0.999	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-41	0.500	-8	2.000	2	5.000	5	10.00	-1

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 METALS Water
EPA 7470A

Inst : MET04
Calnum : 49375075001 Cal Date : 17-SEP-2009 Type : WATER

ICV 49375075007 (17-SEP-2009) stds: S12967

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	5.330	ug/L	7	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49375075008 File : 154984 Time : 17-SEP-2009 11:33
Cal : 49375075001 Caldate : 17-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49375075019 File : 154984 Time : 17-SEP-2009 12:00
Cal : 49375075001 Caldate : 17-SEP-2009 Caltype : WATER
Standards: S12968

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2659.5	2542.8	5.000	5.000	ug/L	0	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49375075020 File : 154984 Time : 17-SEP-2009 12:02
Cal : 49375075001 Caldate : 17-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49375075031 File : 154984 Time : 17-SEP-2009 12:27
Cal : 49375075001 Caldate : 17-SEP-2009 Caltype : WATER
Standards: S12968

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	2659.5	2545.6	5.000	5.010	ug/L	0	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 METALS Water
EPA 7470A

Inst : MET04 IDF : 1.0
Seqnum : 49375075032 File : 154984 Time : 17-SEP-2009 12:29
Cal : 49375075001 Caldate : 17-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03757	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 154984
Started By : WNH
Method : METHOD
Spike #1 ID : S12965

Prep Date : 17-SEP-2009 08:30

Analysis : HG
Finished By : WNH
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214884-003		Water	50	50	1	1.0						HG-200	
214884-007		Water	50	50	1	1.0						HG-200	
214901-008		Water	50	50	1	1.0						TAL/HG	
214901-009		Water	50	50	1	1.0						TAL/HG	
214901-010		Water	50	50	1	1.0						TAL/HG	
214903-001		Filtrate	50	50	1	1.0						T22/HG	
214921-001		Water	50	50	1	1.0						HG-200	
214924-002		Water	50	50	1	1.0						TAL/HG	
214924-003		Water	50	50	1	1.0						TAL/HG	
214924-004		Water	50	50	1	1.0						TAL/HG	
214924-005		Water	50	50	1	1.0						TAL/HG	
214924-006		Water	50	50	1	1.0						TAL/HG	
214924-007		Water	50	50	1	1.0						TAL/HG	
214924-009		Water	50	50	1	1.0						TAL/HG	
214928-001		Water	50	50	1	1.0						HG	
214940-002		Water	50	50	1	1.0						TAL/HG	
214940-003		Water	50	50	1	1.0						TAL/HG	
214940-004		Water	50	50	1	1.0						TAL/HG	
QC512341	BLANK	Water	50	50	1	1.0							
QC512342	BS	Water	50	50	1	1.0		1.25					
QC512343	BSD	Water	50	50	1	1.0		1.25					
QC512344	MS	Water	50	50	1	1.0		1.25					
QC512345	MSD	Water	50	50	1	1.0		1.25					
QC512346	SER	Water	50	50	1	1.0							

Reviewed by: WNH Date: 09/17/09

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 154984

Date Digested: 9/17/09

Digestion Method: ☑ EPA 7470A/ EPA 245.1 ☐ _____

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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
214884-003	A	50	50	N	
7	A				
214901-008	G				
9	G				
10	G				
214903-001	G				
214921-001	A				MSS
214924-002	G				
3	F				
4	F				
5	F				
6	F				
7	F				
9	G				
214928-001	A				
214940-002	I				
3	H				
4	I				
Blank QC512341					
BS 2					
BSD 3					
MS 4	A				
MSD 5	A				

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	ELC09163	9/17/09
1.25 mL of spike solution was added to all spikes	S12965	
ICAL Source LIMS S#	S12966	
ICV / CCV LIMS S#	S12967 / S12968	
Digestion of Samples & Standards: Digestion Temperature (degrees C)	95°	
Digestion Started at (time)	0830	
concentrated H_2SO_4	G35026	
concentrated HNO_3	H12022	
5% $KMnO_4$	082509	
5% $K_2S_2O_8$	062209	
NaCl.hydroxylamine hydrochloride	090209	
Stannous Chloride	091509	
Digestion Completed at (time)	1030	
☐ filtered thru' 0.45 um syringe filter (lot #)		

9/17/09

Prep Chemist / Date

Continued from page ____

Continued on page ____

9/17/09

Reviewed by / Date

Laboratory Job Number 214924

ANALYTICAL REPORT

Ion Chromatography

Matrix: Water

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Matrix:	Water	Received:	09/16/09
Units:	mg/L		

Field ID: ASE-60A-9C1 Lab ID: 214924-002
Type: SAMPLE Sampled: 09/15/09 05:52

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.53	0.10	1.000	155010	09/18/09 01:48	
Chloride	210	5.0	25.00	154937	09/16/09 14:39	D1
Nitrogen, Nitrate	5.8	0.25	5.000	154937	09/16/09 20:45	D2
Sulfate	91	2.5	5.000	154937	09/16/09 20:45	D2

Field ID: ASE-73A-9C1 Lab ID: 214924-003
Type: SAMPLE Sampled: 09/15/09 06:48

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.44	0.10	1.000	155010	09/18/09 02:23	
Chloride	230	5.0	25.00	154937	09/16/09 14:57	D1
Nitrogen, Nitrate	4.0	0.05	1.000	154937	09/16/09 21:02	
Sulfate	110	2.5	5.000	154937	09/17/09 07:12	D2

Field ID: ASE-85A-9C1 Lab ID: 214924-004
Type: SAMPLE Sampled: 09/15/09 07:50

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.31	0.10	1.000	155010	09/18/09 02:58	
Chloride	240	5.0	25.00	154937	09/16/09 15:14	D1
Nitrogen, Nitrate	5.0	0.25	5.000	154937	09/16/09 21:55	D2
Sulfate	120	2.5	5.000	154937	09/16/09 21:55	D2

Field ID: BC-17-9C1 Lab ID: 214924-005
Type: SAMPLE Sampled: 09/15/09 09:05

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	1.6	0.10	1.000	155010	09/18/09 03:33	
Chloride	200	5.0	25.00	154937	09/16/09 15:32	D1
Nitrogen, Nitrate	2.6	0.05	1.000	154937	09/16/09 22:12	
Sulfate	140	5.0	10.00	154937	09/17/09 07:29	D2

Field ID: ASE-70A-9C1 Lab ID: 214924-006
Type: SAMPLE Sampled: 09/15/09 09:57

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	1.6	0.10	1.000	155010	09/18/09 04:08	
Chloride	210	5.0	25.00	154937	09/16/09 15:49	D1
Nitrogen, Nitrate	4.0	0.05	1.000	154937	09/17/09 00:14	
Sulfate	160	5.0	10.00	154937	09/17/09 07:47	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Matrix:	Water	Received:	09/16/09
Units:	mg/L		

Field ID: PL-520-9C1 Lab ID: 214924-007
Type: SAMPLE Sampled: 09/15/09 10:07

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	1.6	0.10	1.000	155010	09/18/09 04:43	
Chloride	210	5.0	25.00	154937	09/16/09 16:06	D1
Nitrogen, Nitrate	3.9	0.05	1.000	154937	09/17/09 01:06	
Sulfate	160	5.0	10.00	154937	09/17/09 08:04	D2

Field ID: ASE-76B-9C1 Lab ID: 214924-009
Type: SAMPLE Sampled: 09/15/09 12:33

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Fluoride	0.29	0.10	1.000	155056	09/18/09 11:15	
Chloride	290	5.0	25.00	154937	09/16/09 16:24	D2
Nitrogen, Nitrate	3.9	0.05	1.000	154937	09/17/09 01:58	
Sulfate	140	5.0	10.00	154937	09/17/09 08:22	D2

Type: BLANK Batch#: 154937
Lab ID: QC512157 Analyzed: 09/16/09 08:48
Diln Fac: 1.000

Analyte	Result	RL	ADEQ Flags
Chloride	ND	0.20	
Nitrogen, Nitrate	ND	0.05	
Sulfate	ND	0.50	

Type: BLANK Batch#: 155010
Lab ID: QC512434 Analyzed: 09/17/09 08:25
Diln Fac: 1.000

Analyte	Result	RL	ADEQ Flags
Fluoride	ND	0.10	

Type: BLANK Batch#: 155056
Lab ID: QC512630 Analyzed: 09/18/09 06:28
Diln Fac: 1.000

Analyte	Result	RL	ADEQ Flags
Fluoride	ND	0.10	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512158	Batch#:	154937
Matrix:	Water	Analyzed:	09/16/09 09:05
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Chloride	4.000	3.976	99	90-110	
Nitrogen, Nitrate	1.000	1.032	103	90-110	
Sulfate	10.00	10.12	101	90-110	

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	50.00
MSS Lab ID:	214920-002	Batch#:	154937
Matrix:	Water	Sampled:	09/15/09 11:35
Units:	mg/L	Received:	09/16/09

Type: MS Analyzed: 09/17/09 02:51
Lab ID: QC512200

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Chloride	571.7	100.0	687.5	116 NM	80-120	D2 M3
Nitrogen, Nitrate	<0.02889	25.00	27.62	110	80-120	D2
Sulfate	204.3	250.0	480.0	110	80-120	D2

Type: MSD Analyzed: 09/17/09 03:08
Lab ID: QC512201

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Chloride	100.0	686.4	115 NM	80-120	0	20	D2 M3
Nitrogen, Nitrate	25.00	26.87	107	80-120	3	20	D2
Sulfate	250.0	476.8	109	80-120	1	20	D2

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512435	Batch#:	155010
Matrix:	Water	Analyzed:	09/17/09 08:43
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	2.000	2.100	105	90-110	

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
MSS Lab ID:	214982-007	Batch#:	155010
Matrix:	Water	Sampled:	09/16/09 11:45
Units:	mg/L	Received:	09/17/09

Type: MS Analyzed: 09/17/09 19:57
Lab ID: QC512436

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	0.03843	5.000	5.031	100	80-120	D1

Type: MSD Analyzed: 09/17/09 20:15
Lab ID: QC512437

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Fluoride	5.000	5.247	104	80-120	4	20	D1

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512631	Batch#:	155056
Matrix:	Water	Analyzed:	09/18/09 06:45
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	2.000	2.075	104	90-110	

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
MSS Lab ID:	215020-001	Batch#:	155056
Matrix:	Water	Sampled:	09/17/09 11:00
Units:	mg/L	Received:	09/18/09

Type: MS Analyzed: 09/18/09 21:34
Lab ID: QC512715

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	0.2752	25.00	24.59	97	80-120	D2

Type: MSD Analyzed: 09/18/09 21:52
Lab ID: QC512716

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Fluoride	25.00	25.92	103	80-120	5	20	D2

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 IC Water: EPA 300.0

Inst : IC01 Name : ico1 ical 218
Calnum : 609314572001 Date : 06-AUG-2009 11:27
Units : mg/L X Axis : A Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	218_9	609314572009	L1	06-AUG-2009 11:27	S12185 (500X)
L2	218_10	609314572010	L2	06-AUG-2009 11:45	S12185 (250X)
L3	218_11	609314572011	L3	06-AUG-2009 12:02	S12185 (100X)
L4	218_12	609314572012	L4	06-AUG-2009 12:20	S12185 (25X)
L5	218_13	609314572013	L5	06-AUG-2009 12:37	S12185 (10X)
L6	218_14	609314572014	L6	06-AUG-2009 12:55	S12185 (5X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2557	0.2500	0.2715	0.2753	0.2843	0.3026	QORG		0.26664	0.003595	0.2732	1.000	0.990	
Chloride	0.2116	0.1966	0.2046	0.2030	0.2174	0.2378	QORG		0.19635	0.002075	0.2118	1.000	0.990	
Nitrogen, Nitrate	0.5119	0.5123	0.5161	0.5056	0.5255	0.5510	QORG		0.49875	0.010464	0.5204	1.000	0.990	
Sulfate	0.1616	0.1526	0.1571	0.1521	0.1619	0.1725	QORG		0.15021	4.469E-4	0.1596	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Fluoride	0.100	-4	0.200	-6	0.500	1	2.000	1	5.000	0	10.00	0
Chloride	0.200	7	0.400	0	1.000	3	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrate	0.050	3	0.100	2	0.250	3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	7	1.000	1	2.500	4	10.00	-2	25.00	0	50.00	0

JLM 08/06/09 : ical pts integrated to match previous icals

Analyst: JLM Date: 08/07/09 Reviewer: EAH Date: 08/10/09

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 IC Water
EPA 300.0

Inst : IC01 Name : ico1 ical 218
Calnum : 609314572001 Cal Date : 06-AUG-2009

ICV 609314572016 (218_16 06-AUG-2009) stds: S10785 (25X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.8000	0.7505	mg/L	-6	10	
Chloride	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	1.000	0.9624	mg/L	-4	10	
Sulfate	6.000	5.820	mg/L	-3	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214924 IC Water: EPA 300.0

Inst : IC03
Calnum : 629330432001
Units : mg/L

Name : IC 03 CAL 229
Date : 17-AUG-2009 14:28
X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	229_16	629330432016	L1	17-AUG-2009 14:28	S12185 (500X)
L2	229_17	629330432017	L2	17-AUG-2009 14:45	S12185 (250X)
L3	229_18	629330432018	L3	17-AUG-2009 15:02	S12185 (100X)
L4	229_19	629330432019	L4	17-AUG-2009 15:20	S12185 (25X)
L5	229_20	629330432020	L5	17-AUG-2009 15:37	S12185 (10X)
L6	229_21	629330432021	L6	17-AUG-2009 15:55	S12185 (5X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2540	0.2650	0.2415	0.2487	0.2634	0.2729	QORG		0.25033	0.002271	0.2576	1.000	0.990	
Chloride	0.1624	0.1644	0.1550	0.1641	0.1758	0.1897	QORG		0.16039	0.001470	0.1686	1.000	0.990	
Nitrogen, Nitrate	0.3701	0.3965	0.3888	0.4024	0.4149	0.4371	QORG		0.39277	0.008871	0.4016	1.000	0.990	
Sulfate	0.1152	0.1190	0.1162	0.1211	0.1267	0.1367	QORG		0.11680	3.969E-4	0.1225	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Fluoride	0.100	1	0.200	6	0.500	-4	2.000	-2	5.000	1	10.00	0
Chloride	0.200	1	0.400	2	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrate	0.050	-6	0.100	1	0.250	-2	1.000	0	2.500	0	5.000	0
Sulfate	0.500	-2	1.000	2	2.500	-1	10.00	0	25.00	0	50.00	0

MJB 08/17/09 : ICAL points integrated to match previous ICAL's.

JLM: 08/21/09 MJB: 08/21/09 CP: 08/21/09

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214924 IC Water
EPA 300.0

Inst : IC03 Name : IC 03 CAL 229
Calnum : 629330432001 Cal Date : 17-AUG-2009

ICV 629330432023 (229_23 17-AUG-2009) stds: S10785 (25X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.8000	0.7234	mg/L	-10	10	
Chloride	2.000	1.888	mg/L	-6	10	
Nitrogen, Nitrate	1.000	0.9247	mg/L	-8	10	
Sulfate	6.000	5.819	mg/L	-3	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : L IDF : 1.0
Seqnum : 609374883011 File : 260_11 Time : 17-SEP-2009 08:03
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2823	0.5000	0.5257	mg/L	5	10	
Chloride	0.2118	0.1925	1.000	0.9703	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4974	0.2500	0.2480	mg/L	-1	10	
Sulfate	0.1596	0.1503	2.500	2.484	mg/L	-1	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609374883022 File : 260_22 Time : 17-SEP-2009 18:30
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2884	2.000	2.103	mg/L	5	10	
Chloride	0.2118	0.1983	4.000	3.880	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4890	1.000	0.9612	mg/L	-4	10	
Sulfate	0.1596	0.1475	10.00	9.550	mg/L	-4	10	

JLM 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609374883035 File : 260_35 Time : 17-SEP-2009 22:18
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2990	5.000	5.237	mg/L	5	10	
Chloride	0.2118	0.2094	10.00	9.676	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.5165	2.500	2.462	mg/L	-2	10	
Sulfate	0.1596	0.1554	25.00	24.14	mg/L	-3	10	

JLM 09/18/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609374883059 File : 260_59 Time : 18-SEP-2009 05:18
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2852	2.000	2.081	mg/L	4	10	
Chloride	0.2118	0.1974	4.000	3.864	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4954	1.000	0.9735	mg/L	-3	10	
Sulfate	0.1596	0.1477	10.00	9.561	mg/L	-4	10	

JLM 09/18/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609374883068 File : 260_68 Time : 18-SEP-2009 13:29
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2946	5.000	5.164	mg/L	3	10	
Chloride	0.2118	0.2124	10.00	9.803	mg/L	-2	10	
Nitrogen, Nitrate	0.5204	0.5216	2.500	2.485	mg/L	-1	10	
Sulfate	0.1596	0.1578	25.00	24.47	mg/L	-2	10	

JLM 09/18/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609374883080 File : 260_80 Time : 18-SEP-2009 18:21
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2824	2.000	2.061	mg/L	3	10	
Chloride	0.2118	0.1995	4.000	3.903	mg/L	-2	10	
Nitrogen, Nitrate	0.5204	0.5063	1.000	0.9943	mg/L	-1	10	
Sulfate	0.1596	0.1484	10.00	9.607	mg/L	-4	10	

JLM 09/18/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609374883095 File : 260_95 Time : 18-SEP-2009 22:44
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2942	5.000	5.158	mg/L	3	10	
Chloride	0.2118	0.2113	10.00	9.756	mg/L	-2	10	
Nitrogen, Nitrate	0.5204	0.5168	2.500	2.463	mg/L	-1	10	
Sulfate	0.1596	0.1566	25.00	24.31	mg/L	-3	10	

MJB 09/21/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/21/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : L IDF : 1.0
Seqnum : 629373385011 File : 259_11 Time : 16-SEP-2009 08:24
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2197	0.5000	0.4371	mg/L	**-13**	10	c- ***
Chloride	0.1686	0.1599	1.000	0.9879	mg/L	-1	10	
Nitrogen, Nitrate	0.4016	0.3845	0.2500	0.2434	mg/L	-3	10	
Sulfate	0.1225	0.1224	2.500	2.598	mg/L	4	10	

MJB 09/16/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/16/09 Reviewer: LW Date: 09/22/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629373385028 File : 259_28 Time : 16-SEP-2009 13:30
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2303	2.000	1.810	mg/L	-10	10	
Chloride	0.1686	0.1661	4.000	3.997	mg/L	0	10	
Nitrogen, Nitrate	0.4016	0.4164	1.000	1.036	mg/L	4	10	
Sulfate	0.1225	0.1225	10.00	10.14	mg/L	1	10	

JLM 09/16/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : H IDF : 1.0
Seqnum : 629373385039 File : 259_39 Time : 16-SEP-2009 16:41
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2392	5.000	4.588	mg/L	-8	10	
Chloride	0.1686	0.1744	10.00	9.962	mg/L	0	10	
Nitrogen, Nitrate	0.4016	0.4273	2.500	2.570	mg/L	3	10	
Sulfate	0.1225	0.1292	25.00	25.45	mg/L	2	10	

JLM 09/16/09 : Integrated to match integration of ICAL and CCV .

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629373385061 File : 259_61 Time : 16-SEP-2009 23:04
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2286	2.000	1.797	mg/L	-10	10	
Chloride	0.1686	0.1694	4.000	4.073	mg/L	2	10	
Nitrogen, Nitrate	0.4016	0.4299	1.000	1.069	mg/L	7	10	
Sulfate	0.1225	0.1268	10.00	10.48	mg/L	5	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : H IDF : 1.0
Seqnum : 629373385083 File : 259_83 Time : 17-SEP-2009 05:27
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2402	5.000	4.605	mg/L	-8	10	
Chloride	0.1686	0.1797	10.00	10.24	mg/L	2	10	
Nitrogen, Nitrate	0.4016	0.4421	2.500	2.655	mg/L	6	10	
Sulfate	0.1225	0.1333	25.00	26.20	mg/L	5	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : M IDF : 1.0
Seqnum : 629373385094 File : 259_94 Time : 17-SEP-2009 08:39
Cal : 629330432001 Caldate : 17-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2576	0.2305	2.000	1.812	mg/L	-9	10	
Chloride	0.1686	0.1721	4.000	4.135	mg/L	3	10	
Nitrogen, Nitrate	0.4016	0.4370	1.000	1.086	mg/L	9	10	
Sulfate	0.1225	0.1284	10.00	10.61	mg/L	6	10	

MJB 09/17/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS BLANK USER REPORT FOR 214924 IC Water
EPA 300.0

Inst : IC01 Run Name : QC512434 IDF : 1.0
Seqnum : 609374883012.4 File : 260_12 Time : 17-SEP-2009 08:25

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	u
Chloride	609314572001	06-AUG-2009	ND	0.2000	0.01164	mg/L	u
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	u
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	u

Analyst: MJB Date: 09/23/09 Reviewer: JLM Date: 09/29/09

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883023 File : 260_23 Time : 17-SEP-2009 18:47

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01925]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883036 File : 260_36 Time : 17-SEP-2009 22:35

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	[0.01634]	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.02480]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883060 File : 260_60 Time : 18-SEP-2009 05:35

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01355]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883069 File : 260_69 Time : 18-SEP-2009 13:46

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	[0.01495]	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01644]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883081 File : 260_81 Time : 18-SEP-2009 18:39

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01637]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/18/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609374883096 File : 260_96 Time : 18-SEP-2009 23:02

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01757]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: MJB Date: 09/21/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS BLANK USER REPORT FOR 214924 IC Water
EPA 300.0

Inst : IC03 Run Name : QC512157 IDF : 1.0
Seqnum : 629373385012.3 File : 259_12 Time : 16-SEP-2009 08:48

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	<c- ***
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	u
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	u
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	u

Analyst: MJB Date: 09/23/09 Reviewer: JLM Date: 09/29/09

-=low bias <=opening c=CCV u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385029 File : 259_29 Time : 16-SEP-2009 13:47

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385040 File : 259_40 Time : 16-SEP-2009 16:59

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: JLM Date: 09/16/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385062 File : 259_62 Time : 16-SEP-2009 23:22

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385084 File : 259_84 Time : 17-SEP-2009 05:45

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 214924 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 629373385095 File : 259_95 Time : 17-SEP-2009 08:56

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	629330432001	17-AUG-2009	ND	0.1000	0.03347	mg/L	
Chloride	629330432001	17-AUG-2009	ND	0.2000	0.02734	mg/L	
Nitrogen, Nitrate	629330432001	17-AUG-2009	ND	0.05000	0.01445	mg/L	
Sulfate	629330432001	17-AUG-2009	ND	0.5000	0.05885	mg/L	

Analyst: MJB Date: 09/17/09 Reviewer: LW Date: 09/22/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609314572

Instrument : IC01 Begun : 08/06/09 10:52
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	218_7	X	BLK			08/06/09 10:52	1.0		
008	218_8	IB	CALIB			08/06/09 11:10	1.0		
009	218_9	ICAL	L1			08/06/09 11:27	1.0	1	
010	218_10	ICAL	L2			08/06/09 11:45	1.0	1	
011	218_11	ICAL	L3			08/06/09 12:02	1.0	1	
012	218_12	ICAL	L4			08/06/09 12:20	1.0	1	
013	218_13	ICAL	L5			08/06/09 12:37	1.0	1	
014	218_14	ICAL	L6			08/06/09 12:55	1.0	1	
015	218_15	ICB				08/06/09 13:12	1.0		
016	218_16	ICV				08/06/09 13:30	1.0	2	
017	218_17	CCB/MB	QC506475	Water	153603	08/06/09 13:47	1.0		
018	218_18	BS	QC506476	Water	153603	08/06/09 14:05	1.0	1	
019	218_19	BSD	QC506477	Water	153603	08/06/09 14:22	1.0	1	
020	218_20	SAMPLE	213964-004	Water	153603	08/06/09 14:40	1.0		1:CL=87
021	218_21	MSS	213983-001	Water	153603	08/06/09 15:05	2000		
022	218_22	MSS	213983-001	Water	153603	08/06/09 15:30	100.0		1:CL=130
023	218_23	X	BLK		153603	08/06/09 15:48	1.0		
024	218_24	MSS	213983-001	Water	153603	08/06/09 16:05	50.0		2:CL=200
025	218_25	X	BLK		153603	08/06/09 16:23	1.0		
026	218_26	MS	QC506482	Water	153603	08/06/09 16:40	2000	1	
027	218_27	MSD	QC506483	Water	153603	08/06/09 16:58	2000	1	
028	218_28	CCV	H		153603	08/06/09 17:16	1.0	1	
029	218_29	CCB			153603	08/06/09 17:33	1.0		
030	218_30	BLANK	QC506491	Soil	153606	08/06/09 17:51	1.0		
031	218_31	BS	QC506492	Soil	153606	08/06/09 18:08	1.0	1	
032	218_32	BSD	QC506493	Soil	153606	08/06/09 18:26	1.0	1	
033	218_33	SAMPLE	213697-016	Soil	153606	08/06/09 18:43	1.0		4:CL=57
034	218_34	X	BLK		153606	08/06/09 19:03	1.0		
035	218_35	SDUP	QC506494	Soil	153606	08/06/09 19:21	1.0		3:CL=55
036	218_36	X	BLK		153606	08/06/09 19:38	1.0		
037	218_37	MSS	213697-016	Soil	153606	08/06/09 19:56	5.0		
038	218_38	SDUP	QC506494	Soil	153606	08/06/09 20:13	5.0		
039	218_39	MSS	213697-016	Soil	153606	08/06/09 20:31	10.0		
040	218_40	SDUP	QC506494	Soil	153606	08/06/09 20:48	10.0		
041	218_41	CCV	M		153606	08/06/09 21:06	1.0	1	
042	218_42	CCB			153606	08/06/09 21:23	1.0		
043	218_43	X	CCV		153606	08/06/09 21:41	1.0	1	
044	218_44	X	CCB		153606	08/06/09 21:58	1.0		

JLM 08/06/09 : worked up through #16

JLM 08/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 7 through 44.

Analyst: JLM Date: 08/10/09 Reviewer: EAH Date: 08/10/09

Standards used: 1=S12185 2=S10785

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609374883

Instrument : IC01 Begun : 09/17/09 06:53
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	260_7	X	AS14A 10X			09/17/09 06:53	1.0		
008	260_8	X	BLK			09/17/09 07:11	1.0		
009	260_9	X	BLK			09/17/09 07:28	1.0		
010	260_10	X	BLK			09/17/09 07:46	1.0		
011	260_11	CCV	L			09/17/09 08:03	1.0	1	
012	260_12	CCB/MB	QC512434	Water	155010	09/17/09 08:25	1.0		
013	260_13	LCS	QC512435	Water	155010	09/17/09 08:43	1.0	1	
014	260_14	SAMPLE	214938-001	Water	155010	09/17/09 16:04	5.0		1:CL=53
015	260_15	MSS	214982-007	Water	155010	09/17/09 16:27	1.0		1:CL=23
016	260_16	SAMPLE	214982-008	Water	155010	09/17/09 16:45	1.0		1:CL=23
017	260_17	SAMPLE	214982-004	Water	155010	09/17/09 17:02	1.0		
018	260_18	SAMPLE	214982-006	Water	155010	09/17/09 17:20	1.0		
019	260_19	SAMPLE	214982-005	Water	155010	09/17/09 17:37	1.0		1:CL=21
020	260_20	SAMPLE	214982-003	Water	155010	09/17/09 17:55	1.0		
021	260_21	SAMPLE	214982-001	Water	155010	09/17/09 18:12	1.0		
022	260_22	CCV	M		155010	09/17/09 18:30	1.0	1	
023	260_23	CCB			155010	09/17/09 18:47	1.0		
024	260_24	SAMPLE	214982-002	Water	155010	09/17/09 19:05	1.0		
025	260_25	SAMPLE	214982-009	Water	155010	09/17/09 19:22	1.0		
026	260_26	MSS	214982-007	Water	155010	09/17/09 19:40	5.0		
027	260_27	MS	QC512436	Water	155010	09/17/09 19:57	5.0	1	
028	260_28	MSD	QC512437	Water	155010	09/17/09 20:15	5.0	1	
029	260_29	X	QC512436		155010	09/17/09 20:32	5.0	1	
030	260_30	X	QC512437		155010	09/17/09 20:50	5.0	1	
031	260_31	SAMPLE	214982-008	Water	155010	09/17/09 21:07	2.0		
032	260_32	SAMPLE	214982-005	Water	155010	09/17/09 21:25	2.0		
033	260_33	SAMPLE	214938-001	Water	155010	09/17/09 21:42	2.0		1:CL=110
034	260_34	X	BLK		155010	09/17/09 22:00	1.0		
035	260_35	CCV	H		155010	09/17/09 22:18	1.0	1	
036	260_36	CCB			155010	09/17/09 22:35	1.0		
037	260_37	X	CCV		155010	09/17/09 22:53	1.0	1	
038	260_38	X	CCB		155010	09/17/09 23:10	1.0		
039	260_39	SAMPLE	214922-003	Water	155010	09/17/09 23:28	1.0		2:CL=160
040	260_40	X	BLK		155010	09/17/09 23:45	1.0		
041	260_41	SAMPLE	214922-004	Water	155010	09/18/09 00:03	1.0		1:CL=180
042	260_42	X	BLK		155010	09/18/09 00:20	1.0		
043	260_43	SAMPLE	214922-005	Water	155010	09/18/09 00:38	1.0		2:CL=140
044	260_44	X	BLK		155010	09/18/09 00:55	1.0		
045	260_45	SAMPLE	214922-006	Water	155010	09/18/09 01:13	1.0		3:CL=160
046	260_46	X	BLK		155010	09/18/09 01:30	1.0		
047	260_47	SAMPLE	214924-002	Water	155010	09/18/09 01:48	1.0		3:CL=130
048	260_48	X	BLK		155010	09/18/09 02:05	1.0		
049	260_49	SAMPLE	214924-003	Water	155010	09/18/09 02:23	1.0		2:CL=140
050	260_50	X	BLK		155010	09/18/09 02:40	1.0		
051	260_51	SAMPLE	214924-004	Water	155010	09/18/09 02:58	1.0		2:CL=140
052	260_52	X	BLK		155010	09/18/09 03:15	1.0		
053	260_53	SAMPLE	214924-005	Water	155010	09/18/09 03:33	1.0		2:CL=130
054	260_54	X	BLK		155010	09/18/09 03:50	1.0		
055	260_55	SAMPLE	214924-006	Water	155010	09/18/09 04:08	1.0		2:CL=130
056	260_56	X	BLK		155010	09/18/09 04:25	1.0		
057	260_57	SAMPLE	214924-007	Water	155010	09/18/09 04:43	1.0		2:CL=130
058	260_58	X	BLK		155010	09/18/09 05:00	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609374883

Instrument : IC01 Begun : 09/17/09 06:53
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
059	260_59	CCV	M		155010	09/18/09 05:18	1.0	1	
060	260_60	CCB			155010	09/18/09 05:35	1.0		
061	260_61	X	CCV		155010	09/18/09 05:53	1.0	1	
062	260_62	X	CCB		155010	09/18/09 06:10	1.0		
063	260_63	BLANK	QC512630	Water	155056	09/18/09 06:28	1.0		
064	260_64	LCS	QC512631	Water	155056	09/18/09 06:45	1.0	1	
065	260_65	SAMPLE	214924-009	Water	155056	09/18/09 11:15	1.0		2:CL=170
066	260_66	X	BLK		155056	09/18/09 11:32	1.0		
067	260_67	X	BLK		155056	09/18/09 11:50	1.0		
068	260_68	CCV	H		155056	09/18/09 13:29	1.0	1	
069	260_69	CCB			155056	09/18/09 13:46	1.0		
070	260_70	SAMPLE	215022-002	Water	155056	09/18/09 15:26	1.0		
071	260_71	SAMPLE	215022-003	Water	155056	09/18/09 15:44	1.0		1:CL=35
072	260_72	SAMPLE	215022-005	Water	155056	09/18/09 16:01	1.0		1:CL=54
073	260_73	SAMPLE	215022-006	Water	155056	09/18/09 16:19	1.0		1:CL=45
074	260_74	SAMPLE	215022-007	Water	155056	09/18/09 16:36	1.0		1:CL=71
075	260_75	SAMPLE	215022-009	Water	155056	09/18/09 16:54	1.0		1:CL=54
076	260_76	SAMPLE	215022-010	Water	155056	09/18/09 17:11	1.0		1:CL=52
077	260_77	SAMPLE	215022-011	Water	155056	09/18/09 17:29	1.0		2:CL=40
078	260_78	SAMPLE	215022-012	Water	155056	09/18/09 17:46	1.0		1:CL=48
079	260_79	SAMPLE	215023-001	Water	155056	09/18/09 18:04	100.0		1:CL=26
080	260_80	CCV	M		155056	09/18/09 18:21	1.0	1	
081	260_81	CCB			155056	09/18/09 18:39	1.0		
082	260_82	MSS	215020-001	Water	155056	09/18/09 18:57	25.0		
083	260_83	SAMPLE	215022-011	Water	155056	09/18/09 19:14	2.0		1:CL=22
084	260_84	SAMPLE	215023-001	Water	155056	09/18/09 19:32	5.0		1:CL=240
085	260_85	X	BLK		155056	09/18/09 19:49	1.0		
086	260_86	X	BLK		155056	09/18/09 20:07	1.0		
087	260_87	MSS	215020-001	Water	155056	09/18/09 20:24	1.0		2:SO4=370
088	260_88	X	BLK		155056	09/18/09 20:42	1.0		
089	260_89	X	BLK		155056	09/18/09 20:59	1.0		
090	260_90	SAMPLE	215022-002	Water	155056	09/18/09 21:17	1.0		
091	260_91	MS	QC512715	Water	155056	09/18/09 21:34	25.0	1	
092	260_92	MSD	QC512716	Water	155056	09/18/09 21:52	25.0	1	
095	260_95	CCV	H		155056	09/18/09 22:44	1.0	1	
096	260_96	CCB			155056	09/18/09 23:02	1.0		
097	260_97	X	CCV		155056	09/18/09 23:19	1.0	1	
098	260_98	X	CCB		155056	09/18/09 23:37	1.0		
099	260_99	X	SHUTDOWN		155056	09/18/09 23:54	1.0		

MJB 09/21/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 99.

Analyst: MJB Date: 09/21/09 Reviewer: LW Date: 09/22/09

Standards used: 1=S12185

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629330432

Instrument : IC03 Begun : 08/17/09 11:12
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	229_7	X	AS14A 10X			08/17/09 11:12	1.0		
008	229_8	X	BLK			08/17/09 11:29	1.0		
009	229_9	X	BLK			08/17/09 11:47	1.0		
010	229_10	X	BLK			08/17/09 12:04	1.0		
011	229_11	X	L			08/17/09 12:45	1.0	1	
012	229_12	X	CCB/MB			08/17/09 13:08	1.0		
013	229_13	X	BS			08/17/09 13:25	1.0	1	
014	229_14	X	BSD			08/17/09 13:43	1.0	1	
015	229_15	IB	CALIB			08/17/09 14:10	1.0		
016	229_16	ICAL	L1			08/17/09 14:28	1.0	1	
017	229_17	ICAL	L2			08/17/09 14:45	1.0	1	
018	229_18	ICAL	L3			08/17/09 15:02	1.0	1	
019	229_19	ICAL	L4			08/17/09 15:20	1.0	1	
020	229_20	ICAL	L5			08/17/09 15:37	1.0	1	
021	229_21	ICAL	L6			08/17/09 15:55	1.0	1	
022	229_22	ICB				08/17/09 16:12	1.0		
023	229_23	ICV				08/17/09 16:29	1.0	2	
024	229_24	CCB/MB	QC508003	Water	153959	08/17/09 16:49	1.0		
025	229_25	BS	QC508004	Water	153959	08/17/09 17:06	1.0	1	
026	229_26	BSD	QC508005	Water	153959	08/17/09 17:24	1.0	1	
027	229_27	MSS	214186-001	Water	153959	08/17/09 18:08	25.0		
028	229_28	MS	QC508006	Water	153959	08/17/09 18:25	25.0	1	
029	229_29	MSD	QC508007	Water	153959	08/17/09 18:43	25.0	1	
030	229_30	CCV	M		153959	08/17/09 19:15	1.0	1	
031	229_31	CCB			153959	08/17/09 19:32	1.0		
032	229_32	X	CCV		153959	08/17/09 19:49	1.0	1	
033	229_33	X	CCB		153959	08/17/09 20:07	1.0		

MJB 08/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 15 through 33.

MJB: 08/17/09 JLM: 08/21/09 DMB: 08/21/09

Standards used: 1=S12185 2=S10785

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629373385

Instrument : IC03 Begun : 09/16/09 07:05
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	259_7	X	AS 14A 10X			09/16/09 07:05	1.0		
008	259_8	X	BLK			09/16/09 07:22	1.0		
009	259_9	X	BLK			09/16/09 07:39	1.0		
010	259_10	X	BLK			09/16/09 07:57	1.0		
011	259_11	CCV	L			09/16/09 08:24	1.0	1	
012	259_12	CCB/MB	QC512157	Water	154937	09/16/09 08:48	1.0		
013	259_13	LCS	QC512158	Water	154937	09/16/09 09:05	1.0	1	
014	259_14	SAMPLE	214902-001	Water	154937	09/16/09 09:23	1.0		1:CL=99
015	259_15	MSS	214920-002	Water	154937	09/16/09 09:40	50.0		
016	259_16	SAMPLE	214920-001	Water	154937	09/16/09 09:57	100.0		
017	259_17	MSS	214920-002	Water	154937	09/16/09 10:18	10.0		1:CL=52
018	259_18	MSS	214920-002	Water	154937	09/16/09 10:36	2.0		2:CL=170
019	259_19	X	BLK		154937	09/16/09 10:53	1.0		
020	259_20	X	BLK		154937	09/16/09 11:11	1.0		
021	259_21	SAMPLE	214920-001	Water	154937	09/16/09 11:28	2.0		1:CL=200
022	259_22	X	BLK		154937	09/16/09 11:45	1.0		
023	259_23	X	BLK		154937	09/16/09 12:03	1.0		
024	259_24	SAMPLE	214922-003	Water	154937	09/16/09 12:20	10.0		1:CL=29
025	259_25	SAMPLE	214922-004	Water	154937	09/16/09 12:38	10.0		1:CL=34
026	259_26	X	M		154937	09/16/09 12:55	1.0	1	
027	259_27	X			154937	09/16/09 13:12	1.0		
028	259_28	CCV	M		154937	09/16/09 13:30	1.0	1	
029	259_29	CCB			154937	09/16/09 13:47	1.0		
030	259_30	SAMPLE	214922-005	Water	154937	09/16/09 14:05	25.0		
031	259_31	SAMPLE	214922-006	Water	154937	09/16/09 14:22	25.0		
032	259_32	SAMPLE	214924-002	Water	154937	09/16/09 14:39	25.0		
033	259_33	SAMPLE	214924-003	Water	154937	09/16/09 14:57	25.0		
034	259_34	SAMPLE	214924-004	Water	154937	09/16/09 15:14	25.0		
035	259_35	SAMPLE	214924-005	Water	154937	09/16/09 15:32	25.0		
036	259_36	SAMPLE	214924-006	Water	154937	09/16/09 15:49	25.0		
037	259_37	SAMPLE	214924-007	Water	154937	09/16/09 16:06	25.0		
038	259_38	SAMPLE	214924-009	Water	154937	09/16/09 16:24	25.0		
039	259_39	CCV	H		154937	09/16/09 16:41	1.0	1	
040	259_40	CCB			154937	09/16/09 16:59	1.0		
041	259_41	SAMPLE	214940-002	Water	154937	09/16/09 17:16	5.0		
042	259_42	SAMPLE	214940-004	Water	154937	09/16/09 17:34	5.0		
043	259_43	SAMPLE	214922-003	Water	154937	09/16/09 17:51	1.0		2:CL=180
044	259_44	X	BLK		154937	09/16/09 18:08	1.0		
045	259_45	X	BLK		154937	09/16/09 18:26	1.0		
046	259_46	SAMPLE	214922-004	Water	154937	09/16/09 18:43	1.0		1:CL=200
047	259_47	X	BLK		154937	09/16/09 19:01	1.0		
048	259_48	X	BLK		154937	09/16/09 19:18	1.0		
049	259_49	SAMPLE	214922-005	Water	154937	09/16/09 19:35	1.0		2:CL=150
050	259_50	X	BLK		154937	09/16/09 19:53	1.0		
051	259_51	X	BLK		154937	09/16/09 20:10	1.0		
052	259_52	SAMPLE	214922-006	Water	154937	09/16/09 20:28	5.0		1:CL=52
053	259_53	SAMPLE	214924-002	Water	154937	09/16/09 20:45	5.0		1:CL=41
054	259_54	SAMPLE	214924-003	Water	154937	09/16/09 21:02	1.0		2:CL=160
055	259_55	X	BLK		154937	09/16/09 21:20	1.0		
056	259_56	X	BLK		154937	09/16/09 21:37	1.0		
057	259_57	SAMPLE	214924-004	Water	154937	09/16/09 21:55	5.0		1:CL=44
058	259_58	SAMPLE	214924-005	Water	154937	09/16/09 22:12	1.0		2:CL=140

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629373385

Instrument : IC03 Begun : 09/16/09 07:05
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
059	259_59	X	BLK		154937	09/16/09 22:30	1.0		
060	259_60	X	BLK		154937	09/16/09 22:47	1.0		
061	259_61	CCV	M		154937	09/16/09 23:04	1.0	1	
062	259_62	CCB			154937	09/16/09 23:22	1.0		
063	259_63	X	CCV		154937	09/16/09 23:39	1.0	1	
064	259_64	X	CCB		154937	09/16/09 23:57	1.0		
065	259_65	SAMPLE	214924-006	Water	154937	09/17/09 00:14	1.0		2:CL=150
066	259_66	X	BLK		154937	09/17/09 00:31	1.0		
067	259_67	X	BLK		154937	09/17/09 00:49	1.0		
068	259_68	SAMPLE	214924-007	Water	154937	09/17/09 01:06	1.0		2:CL=150
069	259_69	X	BLK		154937	09/17/09 01:24	1.0		
070	259_70	X	BLK		154937	09/17/09 01:41	1.0		
071	259_71	SAMPLE	214924-009	Water	154937	09/17/09 01:58	1.0		2:CL=180
072	259_72	X	BLK		154937	09/17/09 02:16	1.0		
073	259_73	X	BLK		154937	09/17/09 02:33	1.0		
074	259_74	MS	QC512200	Water	154937	09/17/09 02:51	50.0	1	
075	259_75	MSD	QC512201	Water	154937	09/17/09 03:08	50.0	1	
076	259_76	X	QC512200		154937	09/17/09 03:26	50.0	1	
077	259_77	X	QC512201		154937	09/17/09 03:43	50.0	1	
078	259_78	SAMPLE	214940-002	Water	154937	09/17/09 04:00	1.0		2:SO4=92
079	259_79	X	BLK		154937	09/17/09 04:18	1.0		
080	259_80	SAMPLE	214940-004	Water	154937	09/17/09 04:35	1.0		2:SO4=60
081	259_81	X	BLK		154937	09/17/09 04:53	1.0		
082	259_82	SAMPLE	214922-003	Water	154937	09/17/09 05:10	25.0		
083	259_83	CCV	H		154937	09/17/09 05:27	1.0	1	
084	259_84	CCB			154937	09/17/09 05:45	1.0		
085	259_85	X	CCV		154937	09/17/09 06:02	1.0	1	
086	259_86	X	CCB		154937	09/17/09 06:20	1.0		
087	259_87	SAMPLE	214922-004	Water	154937	09/17/09 06:37	25.0		
088	259_88	SAMPLE	214922-005	Water	154937	09/17/09 06:54	10.0		1:CL=22
089	259_89	SAMPLE	214924-003	Water	154937	09/17/09 07:12	5.0		1:CL=45
090	259_90	SAMPLE	214924-005	Water	154937	09/17/09 07:29	10.0		1:CL=20
091	259_91	SAMPLE	214924-006	Water	154937	09/17/09 07:47	10.0		1:CL=22
092	259_92	SAMPLE	214924-007	Water	154937	09/17/09 08:04	10.0		1:CL=22
093	259_93	SAMPLE	214924-009	Water	154937	09/17/09 08:22	10.0		1:CL=30
094	259_94	CCV	M		154937	09/17/09 08:39	1.0	1	
095	259_95	CCB			154937	09/17/09 08:56	1.0		
096	259_96	X	CCV		154937	09/17/09 09:14	1.0	1	
097	259_97	BLANK	QC512410	Water	155004	09/17/09 09:31	1.0		
098	259_98	LCS	QC512411	Water	155004	09/17/09 09:49	1.0	1	
099	259_99	SAMPLE	214955-002	Water	155004	09/17/09 10:49	1.0		
100	259_100	MSS	214955-003	Water	155004	09/17/09 11:07	50.0		
101	259_101	SAMPLE	214955-005	Water	155004	09/17/09 11:24	25.0		
102	259_102	SAMPLE	214955-001	Water	155004	09/17/09 11:41	25.0		
103	259_103	MSS	214955-003	Water	155004	09/17/09 11:59	1.0		1:CL=160
104	259_104	X	BLK		155004	09/17/09 12:16	1.0		
105	259_105	SAMPLE	214955-001	Water	155004	09/17/09 12:34	1.0		1:CL=100
106	259_106	X	BLK		155004	09/17/09 12:51	1.0		
107	259_107	SAMPLE	214955-005	Water	155004	09/17/09 13:09	1.0		2:CL=180
108	259_108	X	BLK		155004	09/17/09 13:26	1.0		
109	259_109	X	BLK		155004	09/17/09 13:43	1.0		
110	259_110	CCV	H		155004	09/17/09 14:01	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 629373385

Instrument : IC03 Begun : 09/16/09 07:05
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
111	259_111	CCB			155004	09/17/09 14:18	1.0		
112	259_112	MS	QC512412	Water	155004	09/17/09 15:52	50.0	1	
113	259_113	MSD	QC512413	Water	155004	09/17/09 16:09	50.0	1	
114	259_114	SAMPLE	214955-005	Water	155004	09/17/09 16:27	10.0		1:CL=31
115	259_115	MSS	214983-006	Water	155004	09/17/09 17:19	10.0		
116	259_116	SAMPLE	214983-002	Water	155004	09/17/09 17:39	10.0		1:CL=28
117	259_117	SAMPLE	214983-003	Water	155004	09/17/09 17:56	10.0		1:CL=45
118	259_118	SAMPLE	214983-004	Water	155004	09/17/09 18:14	5.0		
119	259_119	SAMPLE	214983-005	Water	155004	09/17/09 18:31	5.0		
120	259_120	SAMPLE	214983-007	Water	155004	09/17/09 18:49	5.0		
121	259_121	MSS	214983-006	Water	155004	09/17/09 19:06	1.0		2:SO4=95
122	259_122	X	BLK		155004	09/17/09 19:23	1.0		
123	259_123	CCV	M		155004	09/17/09 19:41	1.0	1	
124	259_124	CCB			155004	09/17/09 19:58	1.0		
125	259_125	X	CCV		155004	09/17/09 20:16	1.0	1	
126	259_126	X	CCB		155004	09/17/09 20:33	1.0		
127	259_127	SAMPLE	214983-002	Water	155004	09/17/09 20:50	1.0		2:SO4=260
128	259_128	X	BLK		155004	09/17/09 21:08	1.0		
129	259_129	X	BLK		155004	09/17/09 21:25	1.0		
130	259_130	SAMPLE	214983-003	Water	155004	09/17/09 21:43	1.0		2:SO4=290
131	259_131	X	BLK		155004	09/17/09 22:00	1.0		
132	259_132	X	BLK		155004	09/17/09 22:18	1.0		
133	259_133	SAMPLE	214983-004	Water	155004	09/17/09 22:35	1.0		2:CL=76
134	259_134	X	BLK		155004	09/17/09 22:52	1.0		
135	259_135	SAMPLE	214983-005	Water	155004	09/17/09 23:10	1.0		2:SO4=81
136	259_136	X	BLK		155004	09/17/09 23:27	1.0		
137	259_137	SAMPLE	214983-007	Water	155004	09/17/09 23:45	1.0		2:SO4=71
138	259_138	X	BLK		155004	09/18/09 00:02	1.0		
139	259_139	SAMPLE	214983-008	Water	155004	09/18/09 00:19	1.0		2:SO4=71
140	259_140	X	BLK		155004	09/18/09 00:37	1.0		
141	259_141	MS	QC512506	Water	155004	09/18/09 00:54	10.0	1	
142	259_142	MSD	QC512507	Water	155004	09/18/09 01:12	10.0	1	
143	259_143	X	QC512506		155004	09/18/09 01:29	10.0	1	
144	259_144	X	QC512507		155004	09/18/09 01:46	10.0	1	
145	259_145	CCV	H		155004	09/18/09 02:04	1.0	1	
146	259_146	CCB			155004	09/18/09 02:21	1.0		
147	259_147	X	CCV		155004	09/18/09 02:39	1.0	1	
148	259_148	X	CCB		155004	09/18/09 02:56	1.0		
149	259_149	SAMPLE	214983-002	Water	155004	09/18/09 03:13	25.0		
150	259_150	SAMPLE	214983-003	Water	155004	09/18/09 03:31	50.0		
151	259_151	SAMPLE	214983-008	Water	155004	09/18/09 03:48	5.0		
152	259_152	CCV	M		155004	09/18/09 04:06	1.0	1	
153	259_153	CCB			155004	09/18/09 04:23	1.0		

JLM 09/18/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 7 through 153.

LW 09/22/09 : Sequence reviewed through file 259_95

Analyst: JLM Date: 09/18/09 Reviewer: _____ Date: _____

Standards used: 1=S12185

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 154957
Date Started: 9/16/09
Prep Chemist: MSB

BK 2918
Page 41

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	214902-001 A	.56	1x	S	
2	214920-001 J	3.38	2x/100x	↓	
3	↓ -002 AA	2.95	2x/10x/50x	↓	MSS
4	214922-003 D	1.43	1x/10x/25x	↓	
5	↓ -004 ↓	1.78	1x/10x/25x	↓	
6	↓ -005 ↓	1.44	1x/10x/25x	↓	
7	↓ -006 ↓	1.73	5x/25x	↓	
8	214924-002 D	1.18	5x/25x	↓	
9	↓ -003 ↓	1.48	1x/25x	↓	
10	↓ -004 ↓	1.48	5x/25x	↓	
11	↓ -005 ↓	1.37	1x/25x	↓	
12	↓ -006 ↓	1.48	1x/25x	↓	
13	↓ -007 ↓	1.48	1x/25x	↓	
14	↓ -009 ↓	1.62	1x/25x	↓	
15	214940-002 J	.87	1x/5x	↓	
16	↓ -004 J	.70	1x/5x	↓	
17	Blank QC 512157	N/A	1x	N/A	
18	~~BS~~ LCS 158	↓	↓	↓	
19	~~BSD~~ MS 158 200	2.95	50x	5	
20	MSD ↓ 201	↓	↓	↓	
					MSB 9/17/09

		Mfg & Lot # / Time / Program	Initials / Date
LCS MSB 9/17/09	Eluent Reagent ID	100x JM 9/5/09	MSB 9/17/09
~~BS/BSD~~ Spiked with .2 mL of :		512185	↓
MS/MSD Spiked with .1 mL of :		512185	↓
Filters Used:	Ag: OnGuard II Ag	N/A	↓
	Na: OnGuard II Na	↓	↓
	P: OnGuard II P	↓	↓
	RP: OnGuard II RP	↓	↓
	S: (0.20um)/0.45um	Sartorius #16352	↓

MSB 9/17/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

9/21/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 155010
Date Started: 9/17/09
Prep Chemist: MJB

BK 2918
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	214922-003 D	1.43	1x	S	
2	004	1.78			
3	005	1.44			
4	006	1.73			
5	214924-002	1.18			
6	003	1.48			
7	004	1.48			
8	005	1.37			
9	006	1.48			
10	007				
11	214938-001 A	1.19	2x/5x		
12	214982-001 E	0.11	1x		
13	002 E	0.09			
14	003 D	0.19			
15	004 D	0.28			
16	005 D	0.23	1x/2x		
17	006 D	0.13	1x		
18	007 L	0.25	1x/5x		MSS
19	008 D	0.22	1x/2x		
20	009 E	0.02	1x		
	MB QC512434	N/A	1x	N/A	
	LCS 5				
	MS 6	0.25	5x	S	
	MSD 7				

LCS JLM 9/18/09
~~BS/BS~~D Spiked with 0.2 mL of :
MS/MSD Spiked with 0.1 mL of :
Filters Used:

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x JLM 9/5/09	JLM 9/18/09
Ag: OnGuard II Ag	512185	
Na: OnGuard II Na	N/A	
P: OnGuard II P		
RP: OnGuard II RP		
S: (0.20um) 0.45um	Sartorius #16852	

9/18/09
Extraction Chemist / Date

Continued from page ____
Continued on page ____

9/18/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 155056
Date Started: 9/10/09
Prep Chemist: JLM

BK 2918
Page 44

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	214924-009 D	1.62	1x	5	
2	215020-001 H	2.43	1x/25x		MSS
3	215022-002 G	.84	1x		
4	-003 G	.92	1x		
5	-005 H	1.21	1x		
6	-006 D	1.22	1x		
7	-007 D	.98	1x		
8	-009 G	1.12	1x		
9	-010 G	.99	1x		
10	-011 G	.70	1x/2x		
11	-012 G	.99	1x		
12	215023-001 A	8.87	100x/5x		
13	Blank QC 512630	N/A	1x	N/A	
14	LCS 631				
15	MS 715	2.43	25x	5	
16	MSD 716				
17					
18					
19					MSB 9/21/09
20					

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100x JLM 9/5/09	JLM 9/10/09
BS/BSD Spiked with	0.2 mL of :	512185	
MS/MSD Spiked with	0.1 mL of :		
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Sartorius #16352	

JLM 9/10/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

MSB 9/21/09
Reviewed by / Date

Laboratory Job Number 214924

ANALYTICAL REPORT

Wet Chemistry

Matrix: Water

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	09/15/09
Units:	mg/L	Received:	09/16/09
Batch#:	155385	Analyzed:	09/28/09

Field ID: ASE-60A-9C1 Lab ID: 214924-002
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	200	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	200	6.7	

Field ID: ASE-73A-9C1 Lab ID: 214924-003
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	320	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	320	6.7	

Field ID: ASE-85A-9C1 Lab ID: 214924-004
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	320	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	320	6.7	

Field ID: BC-17-9C1 Lab ID: 214924-005
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	290	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	290	6.7	

Field ID: ASE-70A-9C1 Lab ID: 214924-006
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	290	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	290	6.7	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	09/15/09
Units:	mg/L	Received:	09/16/09
Batch#:	155385	Analyzed:	09/28/09

Field ID: PL-520-9C1 Lab ID: 214924-007
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	290	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	290	6.7	

Field ID: ASE-76B-9C1 Lab ID: 214924-009
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	250	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	250	6.7	

Type: BLANK Diln Fac: 1.000
Lab ID: QC513978

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	ND	1.0	
Alkalinity, Carbonate	ND	1.0	
Alkalinity, Hydroxide	ND	1.0	
Alkalinity, Total as CaCO3	ND	1.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC513979	Batch#:	155385
Matrix:	Water	Analyzed:	09/28/09

Spiked	Result	%REC	Limits	ADEQ Flags
200.0	186.4	93	90-100	

51.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	155385
MSS Lab ID:	214920-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	mg/L	Analyzed:	09/28/09

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC513980	490.7	200.0	680.0	95	80-120			
MSD	QC513981		200.0	684.0	97	80-120	1	25	

RPD= Relative Percent Difference

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 155385
Date Started: 28-SEP-2009
Batched by : Shu Ting Liu

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
214920-001			Parsons Infrastruc	Water	ALKALINITY	28-SEP-2009
214920-002			Parsons Infrastruc	Water	ALKALINITY	28-SEP-2009
214922-003			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214922-004			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214922-005			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214922-006			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-002			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-003			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-004			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-005			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-006			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-007			CH2M Hill	Water	ALKALINITY	28-SEP-2009
214924-009			CH2M Hill	Water	ALKALINITY	28-SEP-2009
215083-001			Shaw E&I	Water	ALKALINITY	28-SEP-2009
215083-002			Shaw E&I	Water	ALKALINITY	28-SEP-2009
215084-001			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215084-002			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215084-003			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215100-001			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
215100-002			LFR Levine Fricke	Water	ALKALINITY	28-SEP-2009
QC513978	BLANK			Water	ALKALINITY	
QC513979	LCS			Water	ALKALINITY	
QC513980	MS	of 214920-002		Water	ALKALINITY	
QC513981	MSD	of 214920-002		Water	ALKALINITY	

Analysis: **Alkalinity**
Method: **EPA 310.1 / SMWW 2320B**
SOP#: Alkalinity_rv 8.doc

Analyst: STL
Analysis Date: **09/28/09**
Batch No: **155385**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

SAMPLE & BATCH QC	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinty as $CaCO_3$ (mg/L)	Low Alkalinity (pH 4.5 - 4.2) Volume (mL)	Low Alkalinity as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)	% Rec.	% RPD
MB	6.3	100	0.00	0.08	ND			1.0		
LCS	10.2	25	2.12	4.66	186.40			4.0	93	
214920-002	7.7	15	0.00	7.36	490.67		n/a	6.7		
MS	9.1	25	1.78	17.00	680.00			4.0	95	
MSD	9.1	25	1.82	17.10	684.00			4.0	97	1
214920-001	7.3	15	0.00	10.71	714.00		n/a	6.7		
214920-002	7.7	15	0.00	7.36	490.67		n/a	6.7		
214922-003	7.5	15	0.00	3.86	257.33		n/a	6.7		
214922-004	7.1	15	0.00	6.92	461.33		n/a	6.7		
214922-005	7.8	15	0.00	4.24	282.67		n/a	6.7		
214922-006	7.4	15	0.00	4.65	310.00		n/a	6.7		
214924-002	7.4	15	0.00	3.05	203.33		n/a	6.7		
214924-003	7.5	15	0.00	4.74	316.00		n/a	6.7		
214924-004	7.5	15	0.00	4.80	320.00		n/a	6.7		
214924-005	7.7	15	0.00	4.33	288.67		n/a	6.7		
214924-006	7.5	15	0.00	4.32	288.00		n/a	6.7		
214924-007	7.4	15	0.00	4.40	293.33		n/a	6.7		
214924-009	7.3	15	0.00	3.79	252.67		n/a	6.7		
215083-001	8.4	15	0.10	8.14	542.67		n/a	6.7		
215083-002	6.2	15	0.00	10.51	700.67		n/a	6.7		
215084-001	6.8	15	0.00	4.97	331.33		n/a	6.7		
215084-002	6.9	15	0.00	18.53	1235.33		n/a	6.7		
215084-003	7.1	15	0.00	8.70	580.00		n/a	6.7		
215100-001	7.2	15	0.00	3.55	236.67		n/a	6.7		
215100-002	7.1	15	0.00	3.50	233.33		n/a	6.7		

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: DMB 9/28/09

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Curtis Tompkins, Ltd.

Template: F:\inorgan\wetstuf\alkalinity.xls
Ver.8.8, Effective 1/28/08

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: STL
Analysis Date: 09/28/09
Batch No: 155385

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
214920-001	0.0	714.00	714.000	714.000	0.000	0.000
214920-002	0.0	490.67	490.667	490.667	0.000	0.000
214922-003	0.0	257.33	257.333	257.333	0.000	0.000
214922-004	0.0	461.33	461.333	461.333	0.000	0.000
214922-005	0.0	282.67	282.667	282.667	0.000	0.000
214922-006	0.0	310.00	310.000	310.000	0.000	0.000
214924-002	0.0	203.33	203.333	203.333	0.000	0.000
214924-003	0.0	316.00	316.000	316.000	0.000	0.000
214924-004	0.0	320.00	320.000	320.000	0.000	0.000
214924-005	0.0	288.67	288.667	288.667	0.000	0.000
214924-006	0.0	288.00	288.000	288.000	0.000	0.000
214924-007	0.0	293.33	293.333	293.333	0.000	0.000
214924-009	0.0	252.67	252.667	252.667	0.000	0.000
215083-001	6.7	536.00	542.667	529.333	13.333	0.000
215083-002	0.0	700.67	700.667	700.667	0.000	0.000
215084-001	0.0	331.33	331.333	331.333	0.000	0.000
215084-002	0.0	1235.33	1235.333	1235.333	0.000	0.000
215084-003	0.0	580.00	580.000	580.000	0.000	0.000
215100-001	0.0	236.67	236.667	236.667	0.000	0.000
215100-002	0.0	233.33	233.333	233.333	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 09/28/09 H_2SO_4 Normality = 0.02
Method: **EPA 310.1** Batch No: 155385 Analyst: STL

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
214920-001	714.000	870.542	0.000	0.000
214920-002	490.667	598.244	0.000	0.000
214922-003	257.333	313.753	0.000	0.000
214922-004	461.333	562.479	0.000	0.000
214922-005	282.667	344.641	0.000	0.000
214922-006	310.000	377.967	0.000	0.000
214924-002	203.333	247.914	0.000	0.000
214924-003	316.000	385.282	0.000	0.000
214924-004	320.000	390.159	0.000	0.000
214924-005	288.667	351.956	0.000	0.000
214924-006	288.000	351.143	0.000	0.000
214924-007	293.333	357.646	0.000	0.000
214924-009	252.667	308.063	0.000	0.000
215083-001	542.667	645.388	7.996	0.000
215083-002	700.667	854.286	0.000	0.000
215084-001	331.333	403.977	0.000	0.000
215084-002	1235.333	1506.177	0.000	0.000
215084-003	580.000	707.163	0.000	0.000
215100-001	236.667	288.555	0.000	0.000
215100-002	233.333	284.491	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook | EPA 310.1 / SMWW 2320B | Curtis & Tompkins, Ltd.

LIMS Batch #: 155385
Matrix: STL

Date: 9/28/09
Time: 12:35

Benchbook#: BK2922
Page: 14

C[illegible]4.0: LIMS#: 511916
C[illegible]7.0: LIMS#: 597872
[illegible]8.0: LIMS#: 592189
[illegible]its 92 - 102): 100.4

NaCO3 Vol Spiked (mL): 5
NaCO3 Std Conc (mg/L): 1000
NaCO3 LIMS#: 512146
H_2SO_4 Normality: 0.0200
H_2SO_4 Reagent ID: RICCA-1906170

Container ID		Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
		6.3	100	—	0.08		
						SC 9/28/09	
[illegible]LCS		10.2	25	2.12	4.66		
[illegible]-001	F	7.3	15	—	10.71		
-002	A	7.7	15	—	7.36		
[illegible]-002		9.1	25	1.78	17.00		
[illegible]-002		9.1	25	1.82	17.10		
[illegible]2-003	E	7.5	15	—	3.86		
-004	G	7.1	15	—	6.92		
-005	G	7.8	15	—	4.24		
-006	G	7.4	15	—	4.65		
[illegible]24-002	D	7.4	15	—	3.05		
-003	E	7.5	15	—	4.74		
-004	E	7.5	15	—	4.80		
-005	F	7.7	15	—	4.33		
-006	F	7.5	15	—	4.32		
-007	G	7.4	15	—	4.40		
-009	E	7.3	15	—	3.79		
[illegible]5083-001	J	8.4	15	0.10	8.14		
-002	J	6.2	15	—	10.51		
[illegible]15084-001	H	6.8	15	—	4.97		
-002	H	6.9	15	—	18.53		
-003	H	7.1	15	—	8.70		
[illegible]15100-001	D	7.2	15	—	3.55		
-002	D	7.1	15	—	3.50		

*If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

SC 9/28/09
Analyst / Date

DMB 9/28/09
Reviewed by / Date

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	154965
Matrix:	Water	Received:	09/16/09
Units:	mg/L	Analyzed:	09/16/09 15:45
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled	ADEQ Flags
ASE-60A-9C1	SAMPLE	214924-002	ND	0.01	09/15/09 05:52	
ASE-73A-9C1	SAMPLE	214924-003	ND	0.01	09/15/09 06:48	
ASE-85A-9C1	SAMPLE	214924-004	ND	0.01	09/15/09 07:50	
BC-17-9C1	SAMPLE	214924-005	ND	0.01	09/15/09 09:05	
ASE-70A-9C1	SAMPLE	214924-006	ND	0.01	09/15/09 09:57	
PL-520-9C1	SAMPLE	214924-007	ND	0.01	09/15/09 10:07	
ASE-76B-9C1	SAMPLE	214924-009	ND	0.01	09/15/09 12:33	
	BLANK	QC512263	ND	0.01		

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	214924	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ASE-23B-9C1	Batch#:	154965
MSS Lab ID:	214922-003	Sampled:	09/15/09 03:00
Matrix:	Water	Received:	09/16/09
Units:	mg/L	Analyzed:	09/16/09 15:45

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
LCS	QC512264		1.000	1.092	109	90-110			
MS	QC512265	<0.01000	1.000	0.8311	83 *	85-115			M2
MSD	QC512266		1.000	0.8260	83 *	85-115	1	20	M2

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 154965
Date Started: 16-SEP-2009
Batched by : Patrick Perin

Analysis : HEX CR
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
214922-003			CH2M Hill	Water	HEX CR	28-SEP-2009
214922-004			CH2M Hill	Water	HEX CR	28-SEP-2009
214922-005			CH2M Hill	Water	HEX CR	28-SEP-2009
214922-006			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-002			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-003			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-004			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-005			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-006			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-007			CH2M Hill	Water	HEX CR	28-SEP-2009
214924-009			CH2M Hill	Water	HEX CR	28-SEP-2009
214940-002			Richard Brady And	Water	HEX CR	22-SEP-2009
214940-003			Richard Brady And	Water	HEX CR	22-SEP-2009
214940-004			Richard Brady And	Water	HEX CR	22-SEP-2009
QC512263	BLANK			Water	HEX CR	
QC512264	LCS			Water	HEX CR	
QC512265	MS	of 214922-003		Water	HEX CR	
QC512266	MSD	of 214922-003		Water	HEX CR	

Analysis:	**Hexavalent Chromium**	Analyst:	PAP
Method:	**EPA 7196A** / SMWW 3500 Cr-D	Prep & Analysis Date:	**9/16/2009**
Instrument:	Hach DR 2800	Batch Number:	**154965**
Wavelength:	540 nm (1 cm cell)	Matrix:	Water
SOP#:	hexcr_h2o_rv 7.doc		

INITIAL CALIBRATION — Calibration Date: 12/2/2008

mg/L	Absorbance	RF
0.010	0.010	1.000
0.025	0.025	1.000
0.050	0.048	0.960
0.100	0.098	0.980
0.250	0.243	0.972
0.750	0.701	0.935
1.250	1.156	0.925

Correlation Coefficient: 1.0000

Average Response: 0.967

%RSD: 3.1

Note: Sample calculations based on average response.

CALIBRATION VERIFICATION DATA — ICV / CCV Recovery Limits: 90 - 110%

	Dilution Factor	Absorbance	Raw Result (mg/L)	**REPORT (mg/L)**	Spike (mg/L)	Recovery	Reporting Limit (mg/L)
ICV/ **LCS**	1.00	1.056	1.09164	**1.0916**	1.000	**109%**	0.01
ICB/ **MB**	1.00	0.000	0.000	ND			0.01
CCV	1.00	1.056	1.09164	1.0916	1.000	109%	0.01
CCB	1.00	0.000	0.00000	ND			0.01
CCV	1.00	1.056	1.09164	1.0916	1.000	109%	0.01
CCB	1.00	0.000	0.00000	ND			0.01
CCV	1.00	1.040	1.07510	1.0751	1.000	108%	0.01
CCB	1.00	0.000	0.00000	ND			0.01

Reviewed by / Date: DM 9-22-09

Analysis:	**Hexavalent Chromium**	Prep & Analysis Date:	**9/16/2009**	RPD,%	Recovery,%	QC Limits
Method:	EPA 7196A / SMWW 3500 Cr-D	Batch Number:	**154965**	20	90 - 110	LCS/ BS/ BSD
		Matrix:	Water	20	85 - 115	MS/ MSD

SAMPLES & BATCH QC	Dilution Factor	Sample Absorbance	Color Blk Absorbance	Raw Result (mg/L)	REPORT (mg/L)	Reporting Limit (mg/L)	Spike Level	Recovery,%	RPD,%
MB	1.00	0.000		0.00000	ND	0.01			
LCS/BS	1.00	1.056		1.09164	**1.0916**	0.01	1.00	109	
214922-003	1.00	0.195	0.202	-0.00724	ND	0.01			
MS	1.00	1.006	0.202	0.83113	**0.8311**	0.01	1	83 *	
MSD	1.00	1.001	0.202	0.82597	**0.8260**	0.01	1	83 *	1
214922-004	1.00	0.001		0.00103	ND	0.01			
214922-005	1.00	0.002		0.00207	ND	0.01			
214922-006	1.00	0.034	0.001	0.03411	**0.0341**	0.01			
214924-002	1.00	0.002		0.00207	ND	0.01			
214924-003	1.00	0.004		0.00413	ND	0.01			
214924-004	1.00	0.006		0.00620	ND	0.01			
214924-005	1.00	0.006		0.00620	ND	0.01			
214924-006	1.00	0.003		0.00310	ND	0.01			
214924-007	1.00	0.002		0.00207	ND	0.01			
214924-009	1.00	0.004		0.00413	ND	0.01			
214940-002	1.00	0.012	0.01	0.00207	ND	0.01			
214940-003	1.00	0.000		0.00000	ND	0.01			
214940-004	1.00	0.025	0.023	0.00207	ND	0.01			

Hexavalent Chromium (Cr^{6+})
EPA 7196A / SMWW 3500Cr-D

Curtis & Tompkins, Ltd.

Lot Batch #: 154965
Matrix: Water
Analyst: PAD

Pipette #: 4033856
Cal Vol (mL): 0.0475
Mass (g): 0.0475

Benchbook#: **BK2913**
Page: **25**

Date: 9/16/09
Time: 15:45

Spike LIMS S#: 511388
Spike Std Conc (mg/L): 1000
Spike Vol Added (mL): 0.0475

H_2SO_4 Reagent ID: 8/11/09
S-diphenylcarbazide Reagent ID: 190523 RECGR

Container ID		Sample pH	Diln Factor (Vi : Vf)	Vol (mL) Colored	Abs @ 540nm Sample/	Color Blk	Comments
B		<2	1X	47.5	0.000		
C					1.056		
-003	E				0.195	0.202	
003 MS					1.006	0.202	
003 MSD					1.001	0.202	
-004	E				0.001		
005	G				0.002		
006	F				0.034	0.001	
					1.056		
					0.000		
4-002	F				0.002		
-003	G				0.004		
-004					0.006		
-005					0.006		
-006					0.003		
-007	F				0.002		
~~-008~~	E				0.004		
~~-009~~					1.056		
~~-010~~					0.000		
~~-011~~							
40-002					0.012	0.010	AT⇒18:25
-003					0.000		
-004					0.025	0.023	
					1.040		
B					0.000		

PAD 9/24/09

9/16/09
Analyst / Date

Continued from p.____
Continued on p.____

9/16/09
Reviewed by / Date

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 214925
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091409A	214925-001
BC-14-9C1	214925-002
PL-516-9C1	214925-003
BC-13-9C1	214925-004
ASE-69A-9C1	214925-005
PL-518-9C1	214925-006
PL-2102-9C1	214925-007
BC-4-9C1	214925-008
ASE-54A-9C1	214925-009
PL-2101-9C1	214925-010
ASE-86A-9C1	214925-011
ASE-78B-9C1	214925-012

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/02/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214925**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/16/09**
Samples Received:	**09/16/09**

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 09/16/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low responses were observed for 2-hexanone and iodomethane in the CCV analyzed 09/24/09 08:35; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for carbon disulfide; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for a number of analytes in the CCV analyzed 09/25/09 10:31; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recovery was observed for n-butylbenzene in the LCS for batch 155248; this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene, 1,1-dichloroethane, and trans-1,2-dichloroethene in the MS/MSD of ASE-99A-9C1 (lab # 214851-009); the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for n-butylbenzene and iodomethane in the LCS for batch 155309; these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for many analytes in the MS/MSD of ASE-46B-9C1 (lab # 214922-002); the associated RPDs were within limits.

No other analytical problems were encountered.

Chain of Custody

214925

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name: Sky Harbor
Phase:
Location of Site: Phoenix, AZ
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Sampler: M. Weise - D. Foehr J. Vertes
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Full Report TAT: 14

Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Invoice To: Honeywell/Copy J Peterson

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																
1				TB-091409A	9.14.09	0500				1			X														
2				BC-14-~~X~~9C1		0545				3			X														
3				PL-516-~~X~~9C1		0555				3			X														
4				BC-13-~~X~~9C1		0623				3			X														
5				ASE-69A-~~X~~9C1		0715				3			X														
6				PL-518-9C1		0729				3			X														
7				PL-2102-9C1		0829				4			X	X													
8				BC-4-9C1		0926				3			X														
9				ASE-54A-9C1		1019				4			X	X													
10				PL-2101-9C1		1049				4			X	X													
11				ASE-86A-9C1		1136				3			X														
12				ASE-~~87~~B-9C1 -78B-9C1		1230				3			X														

Relinquished by	Company: H+A	Received by	Company: Fed Ex	Condition		Custody Seals Intact	
	Date/Time: 9/15/09 16:00		Date/Time: 09/15/09 16:20	Cooler Temp.			
Relinquished by	Company:	Received by	Company:	Condition		Custody Seals Intact	
	Date/Time:		Date/Time: 9/16/09 1000	Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214925 Date Received 9-16-9 Number of coolers 2
Client Honeywell Project Quarterly UST

Date Opened 9-16-9 By (print) Sevan S (sign) [signature]
Date Logged in [signature] By (print) [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) FedEx # YES NO
   Shipping info Master! 8630 5639 5041

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name — Date 9-15-9
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 5.0, 3.5

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 214925

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/14/09
Units:	ug/L	Received:	09/16/09
Diln Fac:	1.000	Prepared:	09/18/09
Batch#:	155075		

Field ID: PL-2102-9C1 Lab ID: 214925-007
Type: SAMPLE Analyzed: 09/25/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Field ID: ASE-54A-9C1 Lab ID: 214925-009
Type: SAMPLE Analyzed: 09/25/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	90	50-120	

Field ID: PL-2101-9C1 Lab ID: 214925-010
Type: SAMPLE Analyzed: 09/25/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	87	50-120	

Type: BLANK Analyzed: 09/23/09
Lab ID: QC512696

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512697	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,471	99	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-99A-9C1	Batch#:	155075
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Prepared:	09/18/09
Diln Fac:	1.000	Analyzed:	09/23/09

Type: MS Lab ID: QC512698

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	<16.22	2,500	2,452	98	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Type: MSD Lab ID: QC512699

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,407	96	54-120	2	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC512700	Batch#:	155075
Matrix:	Water	Prepared:	09/18/09
Units:	ug/L	Analyzed:	09/23/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,680	107	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214925 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214925 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214925 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626079 File : 264b079 Time : 22-SEP-2009 21:29
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42883	500.0	498.3	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67438	50.00	47.57	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169380626080 File : 264b080 Time : 22-SEP-2009 21:57
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	57446	500.0	500.8	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	63359	50.00	44.70	mg/L	-11	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169380626096 File : 264b096 Time : 23-SEP-2009 05:25
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43307	500.0	503.2	mg/L	1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67479	50.00	47.60	mg/L	-5	15	

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169380626097 File : 264b097 Time : 23-SEP-2009 05:53
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	56996	250.0	248.4	mg/L	-1	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	58264	50.00	41.10	mg/L	**-18**	15	c-

TFB 09/23/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365004 File : 268a004 Time : 25-SEP-2009 08:48
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	42856	500.0	498.0	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	66438	50.00	46.87	mg/L	-6	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: JDG Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169386365005 File : 268a005 Time : 25-SEP-2009 09:16
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	51988	500.0	453.2	mg/L	-9	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	52421	50.00	36.98	mg/L	**-26**	15	c-

Analyst: JDG Date: 09/28/09 Reviewer: EAH Date: 09/29/09

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169386365021 File : 268a021 Time : 25-SEP-2009 17:20
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	43179	500.0	501.7	mg/L	0	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	67373	50.00	47.53	mg/L	-5	15	

JDG 09/27/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 169386365022 File : 268a022 Time : 25-SEP-2009 17:48
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	59293	1000	1034	mg/L	3	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	64196	50.00	45.29	mg/L	-9	15	

JDG 09/27/09 : Separated from coeluting peak.

Analyst: JDG Date: 09/27/09 Reviewer: TFB Date: 09/28/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	264b001	X	PRIMER				09/21/09 07:46	1.0		
002	264b002	X	IB				09/21/09 08:14	1.0		
003	264b003	X	C8-C50				09/21/09 08:42	1.0	1	
004	264b004	X	DSL_250				09/21/09 09:10	1.0	2	
005	264b005	X	MO_500				09/21/09 09:38	1.0	3	
006	264b006	X	DSL_250				09/21/09 11:34	1.0	2	
007	264b007	X	BUNK_500				09/21/09 12:02	1.0	4	
008	264b008	X	MO_500				09/21/09 12:31	1.0	3	
009	264b009	X	IB				09/21/09 13:57	1.0		
010	264b010	CMARKER	CMARKER				09/21/09 14:25	1.0	1	
011	264b011	CCV	MO_500				09/21/09 14:53	1.0	3	
012	264b012	CCV	DSL_250				09/21/09 15:21	1.0	2	
013	264b013	CCV	BUNK_500				09/21/09 16:17	1.0	4	
014	264b014	BLANK	QC512806	S	Soil	155101	09/21/09 17:05	1.0		
015	264b015	LCS	QC512812	S	Soil	155101	09/21/09 17:33	1.0		
016	264b016	MSS	214977-001	S	Soil	155101	09/21/09 18:01	1.0		
017	264b017	MS	QC512808	S	Soil	155101	09/21/09 18:29	1.0		
018	264b018	MSD	QC512809	S	Soil	155101	09/21/09 18:57	1.0		
019	264b019	MSS	214978-001	S	Soil	155101	09/21/09 19:24	1.0		
020	264b020	MS	QC512810	S	Soil	155101	09/21/09 19:52	1.0		
021	264b021	MSD	QC512811	S	Soil	155101	09/21/09 20:20	1.0		
022	264b022	SAMPLE	214977-003	S	Soil	155101	09/21/09 20:48	5.0		
023	264b023	X	IB				09/21/09 21:16	1.0		
024	264b024	SAMPLE	214977-002	S	Soil	155101	09/21/09 21:44	1.0		
025	264b025	CCV	MO_500				09/21/09 22:11	1.0	3	
026	264b026	CCV	DSL_500				09/21/09 22:39	1.0	5	
027	264b027	CCV	BUNK_500				09/21/09 23:07	1.0	4	
028	264b028	X	CCV				09/21/09 23:35	1.0	3	
029	264b029	X	CCV				09/22/09 00:03	1.0	5	
030	264b030	X	CCV				09/22/09 00:31	1.0	4	
031	264b031	SAMPLE	214977-004	S	Soil	155101	09/22/09 00:58	1.0		
032	264b032	SAMPLE	214977-005	S	Soil	155101	09/22/09 01:26	5.0		
033	264b033	SAMPLE	214977-006	S	Soil	155101	09/22/09 01:54	1.0		
034	264b034	SAMPLE	214977-007	S	Soil	155101	09/22/09 02:22	5.0		
035	264b035	SAMPLE	214977-008	S	Soil	155101	09/22/09 02:49	1.0		
036	264b036	SAMPLE	214978-003	S	Soil	155101	09/22/09 03:17	1.0		
045	264b045	X	CCV				09/22/09 03:47	1.0	3	
046	264b046	X	CCV				09/22/09 04:15	1.0	6	
047	264b047	X	CCV				09/22/09 04:43	1.0	4	
048	264b048	SAMPLE	214978-006	S	Soil	155101	09/22/09 05:11	1.0		
049	264b049	SAMPLE	214978-007	S	Soil	155101	09/22/09 05:39	1.0		
050	264b050	CCV	MO_500				09/22/09 06:07	1.0	3	
051	264b051	CCV	DSL_250				09/22/09 06:35	1.0	2	
052	264b052	CCV	BUNK_500				09/22/09 07:02	1.0	4	
053	264b053	SAMPLE	214978-002	S	Soil	155101	09/22/09 08:01	1.0		
054	264b054	SAMPLE	214978-005	S	Soil	155101	09/22/09 08:29	1.0		
055	264b055	SAMPLE	214978-004	S	Soil	155101	09/22/09 08:56	1.0		
056	264b056	SAMPLE	214978-008	S	Soil	155101	09/22/09 09:24	1.0		
057	264b057	X	IB				09/22/09 10:20	1.0		
058	264b058	SAMPLE	214988-001		Water	155106	09/22/09 10:48	1.0		1:BUNKC:12-40=7000
059	264b059	SAMPLE	214988-002		Water	155106	09/22/09 11:15	1.0		1:BUNKC:12-40=7000
060	264b060	SAMPLE	214990-001		Soil	155134	09/22/09 12:24	3.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B Begun : 09/21/09 07:46
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
061	264b061	SAMPLE	214990-004		Soil	155134	09/22/09 12:57	3.0		
062	264b062	SAMPLE	214990-003		Soil	155134	09/22/09 13:26	3.0		
063	264b063	SAMPLE	214990-005		Soil	155134	09/22/09 13:53	3.0		
064	264b064	CCV	MO_500				09/22/09 14:21	1.0	3	
065	264b065	CCV	DSL_1000				09/22/09 14:49	1.0	6	
066	264b066	CCV	BUNK_500				09/22/09 15:17	1.0	4	
067	264b067	CMARKER	CMARKER				09/22/09 15:45	1.0	1	
068	264b068	MS	QC512808	S	Soil	155101	09/22/09 16:22	1.0		
069	264b069	MSD	QC512809	S	Soil	155101	09/22/09 16:50	1.0		
070	264b070	SAMPLE	215017-005		Water	155106	09/22/09 17:18	2.0		
071	264b071	MSS	214910-001		Soil	155134	09/22/09 17:46	1.0		
072	264b072	SAMPLE	214910-003		Soil	155134	09/22/09 18:14	1.0		
073	264b073	X	IB				09/22/09 18:42	1.0		
074	264b074	SAMPLE	215004-001	S	Water	155106	09/22/09 19:10	1.0		
075	264b075	SAMPLE	214959-010	S	Water	155106	09/22/09 19:38	1.0		
076	264b076	SAMPLE	214910-002		Soil	155134	09/22/09 20:06	1.0		
077	264b077	SAMPLE	214959-005	S	Water	155074	09/22/09 20:34	1.0		
078	264b078	SAMPLE	214959-006	S	Water	155074	09/22/09 21:01	1.0		
079	264b079	CCV	MO_500				09/22/09 21:29	1.0	3	
080	264b080	CCV	DSL_500				09/22/09 21:57	1.0	5	
081	264b081	CCV	BUNK_500				09/22/09 22:25	1.0	4	
082	264b082	X	CCV				09/22/09 22:53	1.0	3	
083	264b083	X	CCV				09/22/09 23:21	1.0	5	
084	264b084	X	CCV				09/22/09 23:50	1.0	4	
085	264b085	SAMPLE	214959-007	S	Water	155074	09/23/09 00:18	1.0		
086	264b086	SAMPLE	214959-008	S	Water	155074	09/23/09 00:46	1.0		
087	264b087	SAMPLE	214959-009	S	Water	155074	09/23/09 01:13	1.0		
088	264b088	BLANK	QC512696		Water	155075	09/23/09 01:41	1.0		
089	264b089	LCS	QC512697		Water	155075	09/23/09 02:09	1.0		
090	264b090	LCS	QC512700		Water	155075	09/23/09 02:37	1.0		
091	264b091	MSS	214851-009		Water	155075	09/23/09 03:05	1.0		
092	264b092	MS	QC512698		Water	155075	09/23/09 03:33	1.0		
093	264b093	MSD	QC512699		Water	155075	09/23/09 04:01	1.0		
094	264b094	SAMPLE	214903-001	S	Water	154973	09/23/09 04:29	1.0		
095	264b095	X	CMARKER				09/23/09 04:57	1.0	1	
096	264b096	CCV	MO_500				09/23/09 05:25	1.0	3	
097	264b097	CCV	DSL_250				09/23/09 05:53	1.0	2	
098	264b098	X	CCV				09/23/09 06:21	1.0	3	
099	264b099	X	CCV				09/23/09 06:49	1.0	2	
100	264b100	X	X			155220	09/24/09 11:01	10.0		

JDG 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 52.

JDG 09/22/09 : 37- 44 did not run.

TFB 09/22/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 53 through 66.

JDG 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 67 through 99.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169380626

Instrument : GC15B
Method : EPA 8015B

Begun : 09/21/09 07:46
SOP Version : TEH_rv13

Standards used: 1=S11248 2=S12545 3=S12822 4=S12582 5=S12546 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169386365

Instrument : GC15B Begun : 09/25/09 07:25
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	268a001	X	PRIMER				09/25/09 07:25	1.0		
002	268a002	X	IB				09/25/09 07:53	1.0		
003	268a003	X	CMARKER				09/25/09 08:20	1.0	1	
004	268a004	CCV	MO_500				09/25/09 08:48	1.0	2	
005	268a005	CCV	DSL_500				09/25/09 09:16	1.0	3	
006	268a006	X	QC512558	S	Water	155038	09/25/09 09:44	1.0		
007	268a007	X	QC512559	S	Water	155038	09/25/09 10:12	1.0		
008	268a008	X	QC512560	S	Water	155038	09/25/09 10:40	1.0		
009	268a009	X	QC512561	S	Water	155038	09/25/09 11:07	1.0		
010	268a010	X	QC512562	S	Water	155038	09/25/09 11:35	1.0		
011	268a011	SAMPLE	214922-004		Water	155075	09/25/09 12:40	1.0		
012	268a012	SAMPLE	214922-005		Water	155075	09/25/09 13:08	1.0		
013	268a013	SAMPLE	214923-009		Water	155075	09/25/09 13:36	1.0		
014	268a014	SAMPLE	214924-002		Water	155075	09/25/09 14:04	1.0		
015	268a015	SAMPLE	214925-007		Water	155075	09/25/09 14:31	1.0		
016	268a016	SAMPLE	214925-009		Water	155075	09/25/09 14:59	1.0		
017	268a017	SAMPLE	214925-010		Water	155075	09/25/09 15:27	1.0		
018	268a018	SAMPLE	214980-001		Soil	155270	09/25/09 15:55	1.0		
019	268a019	SAMPLE	214980-004		Soil	155270	09/25/09 16:23	1.0		
020	268a020	SAMPLE	214980-005		Soil	155270	09/25/09 16:52	1.0		
021	268a021	CCV	MO_500				09/25/09 17:20	1.0	2	
022	268a022	CCV	DSL_1000				09/25/09 17:48	1.0	4	
023	268a023	X	CCV				09/25/09 18:16	1.0	2	
024	268a024	X	CCV				09/25/09 18:44	1.0	4	
025	268a025	BLANK	QC513372		Water	155238	09/25/09 19:12	1.0		
026	268a026	SAMPLE	215034-001		Water	155238	09/25/09 19:40	1.0		
027	268a027	SAMPLE	215034-002		Water	155238	09/25/09 20:07	1.0		
028	268a028	SAMPLE	215034-003		Water	155238	09/25/09 20:35	1.0		
029	268a029	SAMPLE	215034-004		Water	155238	09/25/09 21:03	1.0		
030	268a030	SAMPLE	215034-005		Water	155238	09/25/09 21:31	1.0		
031	268a031	SAMPLE	215034-006		Water	155238	09/25/09 21:58	1.0		
032	268a032	SAMPLE	215034-007		Water	155238	09/25/09 22:26	1.0		
033	268a033	SAMPLE	215034-008		Water	155238	09/25/09 22:54	1.0		
034	268a034	SAMPLE	215118-001		Water	155238	09/25/09 23:22	1.0		
035	268a035	X	CMARKER				09/25/09 23:49	1.0	5	
036	268a036	CCV	DSL_500				09/26/09 00:16	1.0	3	
037	268a037	CCV	MO_500				09/26/09 00:43	1.0	2	
038	268a038	X	CCV				09/26/09 01:11	1.0	3	
039	268a039	X	CCV				09/26/09 01:39	1.0	2	

JDG 09/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S11248 2=S12822 3=S12546 4=S12547 5=S11825

SAMPLE PREPARATION SUMMARY

Batch # : 155075
Started By : SFL
Method : 3520C
Spike #1 ID : S12934

Prep Date : 18-SEP-2009 16:45
SOP Version : TEH_3520_rv12
Spike #2 ID : S12972

Analysis : TEH
Finished By : SFL
Units : mL
Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214851-003		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-009		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
214851-010		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-011		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-012		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-013		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-014		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-015		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-016		Water	500	2.5	1	0.005	7	.5				TEHM	
214851-017		Water	500	2.5	1	0.005	7	.5				TEHM	
214881-001		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-004		Water	500	2.5	1	0.005	7	.5				TEHM	
214922-005		Water	500	2.5	1	0.005	7	.5				TEHM	
214923-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214924-002		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-007		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-009		Water	500	2.5	1	0.005	7	.5				TEHM	
214925-010		Water	500	2.5	1	0.005	7	.5				TEHM	
QC512696	BLANK	Water	500	2.5	1	0.005		.5					
QC512697	LCS	Water	500	2.5	1	0.005		.5	.5				
QC512698	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC512699	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC512700	LCS	Water	500	2.5	1	0.005		.5		.5			

Analyst: JDG Date: 09/24/09 Reviewer: TFB Date: 09/24/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

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LIMS Batch No: 155075
LIMS Analysis: TEH
Date Extracted: 9/18/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☐ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214851-003	D	500	7	2.5		
5	E					
9	L					MSS
10	D					
11						
12						
13						
14						
15						
16						
17						
214881-001						
214922-004	I					
05						
214923-009	D					
214924-002	H					
214925-007	D					
9						
10						
MB BLC9/20/09						
LCS 97						
MS 98	K		7			
MSD 99						
LCS 100						MO *

SFL 9/20/09

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129348	SFL 9/18/09
0.5/0.5X mL of TEH_SP was added to all spikes	S129728/S122900	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F0093334	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1645	
Extraction End Time:	12:25	SFL 9/19/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SFL 9/20/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49001904	
Concentrated to final volume at temperature (degrees C)	100°	
Relinquished to TEH Department	✓	

9/18/09

Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

9/21/09

Reviewed by **Date**

Laboratory Job Number 214925

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091409A	Batch#:	155248
Lab ID:	214925-001	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091409A	Batch#:	155248
Lab ID:	214925-001	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	115	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-14-9C1	Batch#:	155248
Lab ID:	214925-002	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	0.5	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-14-9C1	Batch#:	155248
Lab ID:	214925-002	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-516-9C1	Batch#:	155248
Lab ID:	214925-003	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	0.5	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-516-9C1	Batch#:	155248
Lab ID:	214925-003	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	116	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-13-9C1	Batch#:	155309
Lab ID:	214925-004	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-13-9C1	Batch#:	155309
Lab ID:	214925-004	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-69A-9C1	Batch#:	155309
Lab ID:	214925-005	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-69A-9C1	Batch#:	155309
Lab ID:	214925-005	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	112	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-518-9C1	Batch#:	155309
Lab ID:	214925-006	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-518-9C1	Batch#:	155309
Lab ID:	214925-006	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2102-9C1	Batch#:	155309
Lab ID:	214925-007	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.1	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2102-9C1	Batch#:	155309
Lab ID:	214925-007	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-4-9C1	Batch#:	155309
Lab ID:	214925-008	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.7	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	7.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-4-9C1	Batch#:	155309
Lab ID:	214925-008	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	118	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-54A-9C1	Batch#:	155309
Lab ID:	214925-009	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	2.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.9	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-54A-9C1	Batch#:	155309
Lab ID:	214925-009	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	115	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2101-9C1	Batch#:	155309
Lab ID:	214925-010	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	3.3	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	3.4	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	14	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2101-9C1	Batch#:	155309
Lab ID:	214925-010	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	114	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	117	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-86A-9C1	Batch#:	155309
Lab ID:	214925-011	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	4.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	7.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	5.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.0	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	25	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	2.3	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-86A-9C1	Batch#:	155309
Lab ID:	214925-011	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	110	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-78B-9C1	Batch#:	155309
Lab ID:	214925-012	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	28	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	11	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	11	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	33	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.9	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-78B-9C1	Batch#:	155309
Lab ID:	214925-012	Sampled:	09/14/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	114	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	119	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513420	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.90	112	56-140	
Chloromethane	25.00	24.65	99	46-142	
Vinyl Chloride	25.00	25.76	103	49-136	
Bromomethane	25.00	27.88	112	42-154	
Chloroethane	25.00	27.04	108	51-133	
Trichlorofluoromethane	25.00	24.48	98	63-135	
Iodomethane	25.00	30.02 b	120	70-130	V9
Acetone	25.00	22.66	91	48-130	
1,1-Dichloroethene	25.00	26.57	106	68-133	
Methylene Chloride	25.00	26.76	107	71-120	
Carbon Disulfide	25.00	25.62 b	102	56-120	V3
MTBE	25.00	23.82	95	58-120	
trans-1,2-Dichloroethene	25.00	28.91	116	80-120	
Vinyl Acetate	25.00	22.15	89	63-124	
1,1-Dichloroethane	25.00	27.22	109	77-120	
2-Butanone	25.00	23.31	93	57-120	
cis-1,2-Dichloroethene	25.00	27.08	108	75-120	
2,2-Dichloropropane	25.00	27.29	109	72-128	
Chloroform	25.00	25.35	101	78-120	
Bromochloromethane	25.00	27.92	112	78-120	
1,1,1-Trichloroethane	25.00	26.20	105	78-120	
1,1-Dichloropropene	25.00	24.75	99	75-120	
Carbon Tetrachloride	25.00	23.61	94	80-120	
1,2-Dichloroethane	25.00	23.01	92	74-120	
Benzene	25.00	26.25	105	77-120	
Trichloroethene	25.00	25.90	104	78-122	
1,2-Dichloropropane	25.00	25.50	102	76-120	
Bromodichloromethane	25.00	25.14	101	78-120	
Dibromomethane	25.00	24.64	99	77-120	
4-Methyl-2-Pentanone	25.00	20.47	82	65-120	
cis-1,3-Dichloropropene	25.00	27.34	109	76-120	
Toluene	25.00	24.90	100	73-120	
trans-1,3-Dichloropropene	25.00	23.07	92	72-120	
1,1,2-Trichloroethane	25.00	25.30	101	76-120	
2-Hexanone	25.00	19.29 b	77	57-121	V9
1,3-Dichloropropane	25.00	25.29	101	75-120	
Tetrachloroethene	25.00	23.12	92	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513420	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.44	98	76-120	
1,2-Dibromoethane	25.00	24.58	98	77-120	
Chlorobenzene	25.00	24.69	99	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.12	96	77-120	
Ethylbenzene	25.00	25.14	101	78-120	
m,p-Xylenes	50.00	49.64	99	77-120	
o-Xylene	25.00	23.99	96	77-120	
Styrene	25.00	24.94	100	77-120	
Bromoform	25.00	22.35	89	74-121	
Isopropylbenzene	25.00	23.32	93	71-120	
1,1,2,2-Tetrachloroethane	25.00	26.04	104	73-120	
1,2,3-Trichloropropane	25.00	28.42	114	72-120	
Propylbenzene	25.00	24.65	99	76-120	
Bromobenzene	25.00	26.71	107	75-120	
1,3,5-Trimethylbenzene	25.00	28.11	112	77-120	
2-Chlorotoluene	25.00	27.39	110	76-120	
4-Chlorotoluene	25.00	25.84	103	78-120	
tert-Butylbenzene	25.00	21.99	88	76-120	
1,2,4-Trimethylbenzene	25.00	28.73	115	77-120	
sec-Butylbenzene	25.00	22.42	90	80-120	
para-Isopropyl Toluene	25.00	24.59	98	76-120	
1,3-Dichlorobenzene	25.00	25.11	100	75-120	
1,4-Dichlorobenzene	25.00	24.58	98	77-120	
n-Butylbenzene	25.00	34.80	139 *	76-120	L1
1,2-Dichlorobenzene	25.00	25.46	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	24.94	100	65-120	
1,2,4-Trichlorobenzene	25.00	25.60	102	73-121	
Hexachlorobutadiene	25.00	22.47	90	73-123	
Naphthalene	25.00	28.42	114	62-121	
1,2,3-Trichlorobenzene	25.00	26.71	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	108	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513421	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	V1
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513421	Batch#:	155248
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513430

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	30.19	121	56-140	
Chloromethane	<0.2000	25.00	29.34	117	46-142	
Vinyl Chloride	<0.1000	25.00	29.85	119	49-136	
Bromomethane	<0.2000	25.00	28.55	114	42-154	
Chloroethane	<0.2000	25.00	29.56	118	51-133	
Trichlorofluoromethane	<0.2000	25.00	27.84	111	63-135	
Iodomethane	<2.000	25.00	33.08 b	132	60-140	V9
Acetone	<1.000	25.00	25.74	103	48-130	
1,1-Dichloroethene	<0.1000	25.00	29.58	118	68-133	
Methylene Chloride	0.1268	25.00	28.77	115	71-120	
Carbon Disulfide	<0.1000	25.00	28.46 b	114	56-120	V3
MTBE	<0.1000	25.00	25.32	101	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	31.31	125 *	80-120	M1
Vinyl Acetate	<2.000	25.00	20.80	83	63-124	
1,1-Dichloroethane	<0.1000	25.00	30.44	122 *	77-120	M1
2-Butanone	<2.000	25.00	25.06	100	57-120	
cis-1,2-Dichloroethene	<0.1000	25.00	28.82	115	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.15	109	72-128	
Chloroform	0.1233	25.00	27.99	111	78-120	
Bromochloromethane	<0.1000	25.00	28.59	114	78-120	
1,1,1-Trichloroethane	<0.1131	25.00	30.08	120	78-120	
1,1-Dichloropropene	<0.1000	25.00	27.63	111	75-120	
Carbon Tetrachloride	<0.1000	25.00	26.34	105	80-120	
1,2-Dichloroethane	<0.1000	25.00	25.21	101	74-120	
Benzene	<0.1000	25.00	28.12	112	77-120	
Trichloroethene	<0.1000	25.00	27.35	109	78-122	
1,2-Dichloropropane	<0.1000	25.00	26.93	108	76-120	
Bromodichloromethane	<0.1000	25.00	26.73	107	78-120	
Dibromomethane	<0.1000	25.00	25.58	102	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	21.70	87	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	27.77	111	76-120	
Toluene	<0.1000	25.00	25.87	103	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	23.03	92	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	25.34	101	76-120	
2-Hexanone	<2.000	25.00	19.71 b	79	57-121	V9
1,3-Dichloropropane	<0.1000	25.00	25.99	104	75-120	
Tetrachloroethene	<0.1316	25.00	23.79	95	77-120	
Dibromochloromethane	<0.1000	25.00	24.46	98	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.41	98	77-120	
Chlorobenzene	<0.1000	25.00	25.18	101	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.36	97	77-120	
Ethylbenzene	<0.1000	25.00	26.59	106	78-120	
m,p-Xylenes	<0.1594	50.00	53.10	106	77-120	
o-Xylene	<0.1000	25.00	25.49	102	77-120	
Styrene	<0.1000	25.00	24.89	100	77-120	
Bromoform	<0.2000	25.00	22.00	88	74-121	
Isopropylbenzene	<0.1000	25.00	24.21	97	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.25	101	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC		Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	27.45	110		72-120	
Propylbenzene	<0.1000	25.00	25.89	104		76-120	
Bromobenzene	<0.1000	25.00	25.68	103		75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	29.12	116		77-120	
2-Chlorotoluene	<0.1000	25.00	28.40	114		76-120	
4-Chlorotoluene	<0.1000	25.00	26.65	107		78-120	
tert-Butylbenzene	<0.1000	25.00	23.05	92		76-120	
1,2,4-Trimethylbenzene	0.1251	25.00	30.14	120		77-120	
sec-Butylbenzene	<0.1029	25.00	23.14	93		80-120	
para-Isopropyl Toluene	<0.1000	25.00	25.22	101		76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.26	101		75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.55	98		77-120	
n-Butylbenzene	<0.1285	25.00	37.31	149	*	76-120	M1
1,2-Dichlorobenzene	<0.1000	25.00	25.44	102		76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.11	96		65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	25.51	102		73-121	
Hexachlorobutadiene	<0.4000	25.00	22.42	90		73-123	
Naphthalene	<0.4000	25.00	28.28	113		62-121	
1,2,3-Trichlorobenzene	<0.1149	25.00	26.88	108		66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	106	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513431

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	28.23	113	56-140	7	24	
Chloromethane	25.00	27.52	110	46-142	6	24	
Vinyl Chloride	25.00	28.07	112	49-136	6	24	
Bromomethane	25.00	31.18	125	42-154	9	24	
Chloroethane	25.00	28.19	113	51-133	5	25	
Trichlorofluoromethane	25.00	25.54	102	63-135	9	20	
Iodomethane	25.00	33.61 b	134	60-140	2	30	V9
Acetone	25.00	24.48	98	48-130	5	41	
1,1-Dichloroethene	25.00	27.63	111	68-133	7	20	
Methylene Chloride	25.00	27.19	108	71-120	6	20	
Carbon Disulfide	25.00	26.40 b	106	56-120	8	20	V3
MTBE	25.00	24.57	98	58-120	3	21	
trans-1,2-Dichloroethene	25.00	29.19	117	80-120	7	24	
Vinyl Acetate	25.00	19.55	78	63-124	6	24	
1,1-Dichloroethane	25.00	28.00	112	77-120	8	20	
2-Butanone	25.00	23.56	94	57-120	6	32	
cis-1,2-Dichloroethene	25.00	27.25	109	75-120	6	20	
2,2-Dichloropropane	25.00	24.62	98	72-128	10	24	
Chloroform	25.00	25.79	103	78-120	8	20	
Bromochloromethane	25.00	27.28	109	78-120	5	20	
1,1,1-Trichloroethane	25.00	27.46	110	78-120	9	20	
1,1-Dichloropropene	25.00	25.65	103	75-120	7	21	
Carbon Tetrachloride	25.00	24.43	98	80-120	8	21	
1,2-Dichloroethane	25.00	23.57	94	74-120	7	20	
Benzene	25.00	26.30	105	77-120	7	20	
Trichloroethene	25.00	26.02	104	78-122	5	20	
1,2-Dichloropropane	25.00	25.38	102	76-120	6	20	
Bromodichloromethane	25.00	25.35	101	78-120	5	20	
Dibromomethane	25.00	24.74	99	77-120	3	20	
4-Methyl-2-Pentanone	25.00	20.39	82	65-120	6	22	
cis-1,3-Dichloropropene	25.00	26.41	106	76-120	5	20	
Toluene	25.00	24.24	97	73-120	6	20	
trans-1,3-Dichloropropene	25.00	22.25	89	72-120	3	20	
1,1,2-Trichloroethane	25.00	24.77	99	76-120	2	20	
2-Hexanone	25.00	18.31 b	73	57-121	7	25	V9
1,3-Dichloropropane	25.00	24.95	100	75-120	4	20	
Tetrachloroethene	25.00	22.55	90	77-120	5	20	
Dibromochloromethane	25.00	23.66	95	76-120	3	20	
1,2-Dibromoethane	25.00	23.81	95	77-120	2	20	
Chlorobenzene	25.00	23.82	95	78-120	6	20	
1,1,1,2-Tetrachloroethane	25.00	23.32	93	77-120	4	20	
Ethylbenzene	25.00	24.76	99	78-120	7	26	
m,p-Xylenes	50.00	49.00	98	77-120	8	20	
o-Xylene	25.00	23.70	95	77-120	7	20	
Styrene	25.00	23.24	93	77-120	7	20	
Bromoform	25.00	21.52	86	74-121	2	21	
Isopropylbenzene	25.00	22.72	91	71-120	6	20	
1,1,2,2-Tetrachloroethane	25.00	24.71	99	73-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-9C1	Batch#:	155248
MSS Lab ID:	214851-009	Sampled:	09/11/09
Matrix:	Water	Received:	09/12/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	27.41	110	72-120	0	20	
Propylbenzene	25.00	24.18	97	76-120	7	20	
Bromobenzene	25.00	24.92	100	75-120	3	20	
1,3,5-Trimethylbenzene	25.00	27.45	110	77-120	6	20	
2-Chlorotoluene	25.00	26.62	106	76-120	6	20	
4-Chlorotoluene	25.00	25.04	100	78-120	6	20	
tert-Butylbenzene	25.00	21.44	86	76-120	7	21	
1,2,4-Trimethylbenzene	25.00	28.48	113	77-120	6	20	
sec-Butylbenzene	25.00	21.58	86	80-120	7	21	
para-Isopropyl Toluene	25.00	23.88	96	76-120	5	20	
1,3-Dichlorobenzene	25.00	24.13	97	75-120	5	20	
1,4-Dichlorobenzene	25.00	23.53	94	77-120	4	23	
n-Butylbenzene	25.00	34.08	136 *	76-120	9	21	M1
1,2-Dichlorobenzene	25.00	24.43	98	76-120	4	20	
1,2-Dibromo-3-Chloropropane	25.00	23.81	95	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	25.02	100	73-121	2	20	
Hexachlorobutadiene	25.00	20.79	83	73-123	8	25	
Naphthalene	25.00	28.15	113	62-121	0	32	
1,2,3-Trichlorobenzene	25.00	26.54	106	66-123	1	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	107	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513643	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	32.79 b	131	56-140	V3
Chloromethane	25.00	28.19	113	46-142	
Vinyl Chloride	25.00	29.81	119	49-136	
Bromomethane	25.00	32.65 b	131	42-154	V3
Chloroethane	25.00	28.76	115	51-133	
Trichlorofluoromethane	25.00	27.30	109	63-135	
Iodomethane	25.00	35.57 b	142 *	70-130	L1 V3
Acetone	25.00	27.07	108	48-130	
1,1-Dichloroethene	25.00	27.97	112	68-133	
Methylene Chloride	25.00	28.04	112	71-120	
Carbon Disulfide	25.00	26.65	107	56-120	
MTBE	25.00	26.20	105	58-120	
trans-1,2-Dichloroethene	25.00	29.92	120	80-120	
Vinyl Acetate	25.00	23.23	93	63-124	
1,1-Dichloroethane	25.00	27.79	111	77-120	
2-Butanone	25.00	25.44	102	57-120	
cis-1,2-Dichloroethene	25.00	28.57	114	75-120	
2,2-Dichloropropane	25.00	27.74	111	72-128	
Chloroform	25.00	25.83	103	78-120	
Bromochloromethane	25.00	28.27	113	78-120	
1,1,1-Trichloroethane	25.00	26.21	105	78-120	
1,1-Dichloropropene	25.00	25.43	102	75-120	
Carbon Tetrachloride	25.00	23.59	94	80-120	
1,2-Dichloroethane	25.00	23.02	92	74-120	
Benzene	25.00	27.14	109	77-120	
Trichloroethene	25.00	26.80	107	78-122	
1,2-Dichloropropane	25.00	25.75	103	76-120	
Bromodichloromethane	25.00	25.59	102	78-120	
Dibromomethane	25.00	25.33	101	77-120	
4-Methyl-2-Pentanone	25.00	21.59	86	65-120	
cis-1,3-Dichloropropene	25.00	27.70	111	76-120	
Toluene	25.00	25.40	102	73-120	
trans-1,3-Dichloropropene	25.00	23.29	93	72-120	
1,1,2-Trichloroethane	25.00	25.65	103	76-120	
2-Hexanone	25.00	21.73	87	57-121	
1,3-Dichloropropane	25.00	25.44	102	75-120	
Tetrachloroethene	25.00	23.52	94	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513643	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.52	98	76-120	
1,2-Dibromoethane	25.00	25.08	100	77-120	
Chlorobenzene	25.00	25.13	101	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.18	97	77-120	
Ethylbenzene	25.00	25.71	103	78-120	
m,p-Xylenes	50.00	51.49	103	77-120	
o-Xylene	25.00	24.86	99	77-120	
Styrene	25.00	25.89	104	77-120	
Bromoform	25.00	22.75	91	74-121	
Isopropylbenzene	25.00	24.11	96	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.25	101	73-120	
1,2,3-Trichloropropane	25.00	28.32	113	72-120	
Propylbenzene	25.00	25.60	102	76-120	
Bromobenzene	25.00	26.67	107	75-120	
1,3,5-Trimethylbenzene	25.00	28.19	113	77-120	
2-Chlorotoluene	25.00	27.97	112	76-120	
4-Chlorotoluene	25.00	26.72	107	78-120	
tert-Butylbenzene	25.00	22.84	91	76-120	
1,2,4-Trimethylbenzene	25.00	28.79	115	77-120	
sec-Butylbenzene	25.00	22.67	91	80-120	
para-Isopropyl Toluene	25.00	24.58	98	76-120	
1,3-Dichlorobenzene	25.00	25.74	103	75-120	
1,4-Dichlorobenzene	25.00	25.06	100	77-120	
n-Butylbenzene	25.00	35.59 b	142 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.77	103	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.05	100	65-120	
1,2,4-Trichlorobenzene	25.00	25.99	104	73-121	
Hexachlorobutadiene	25.00	21.70	87	73-123	
Naphthalene	25.00	29.17	117	62-121	
1,2,3-Trichlorobenzene	25.00	27.18	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	107	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513644	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513644	Batch#:	155309
Matrix:	Water	Analyzed:	09/25/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	114	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: MS Lab ID: QC513653

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	37.28 b	149 *	56-140	M1 V3
Chloromethane	<0.2000	25.00	37.53	150 *	46-142	M1
Vinyl Chloride	1.384	25.00	38.20	147 *	49-136	M1
Bromomethane	<0.2000	25.00	35.89 b	144	42-154	V3
Chloroethane	<0.2000	25.00	33.77	135 *	51-133	M1
Trichlorofluoromethane	<0.2000	25.00	32.00	128	63-135	
Iodomethane	<2.000	25.00	38.41 b	154 *	60-140	M1 V3
Acetone	<1.000	25.00	28.85	115	48-130	
1,1-Dichloroethene	0.5104	25.00	32.67	129	68-133	
Methylene Chloride	0.1794	25.00	31.95	127 *	71-120	M1
Carbon Disulfide	<0.1000	25.00	31.55	126 *	56-120	M1
MTBE	4.524	25.00	35.52	124 *	58-120	M1
trans-1,2-Dichloroethene	<0.1000	25.00	34.28	137 *	80-120	M1
Vinyl Acetate	<2.000	25.00	25.58	102	63-124	
1,1-Dichloroethane	8.970	25.00	43.19	137 *	77-120	M1
2-Butanone	<2.000	25.00	30.05	120	57-120	
cis-1,2-Dichloroethene	1.967	25.00	34.27	129 *	75-120	M1
2,2-Dichloropropane	<0.1000	25.00	30.58	122	72-128	
Chloroform	0.2213	25.00	31.78	126 *	78-120	M1
Bromochloromethane	<0.1000	25.00	31.76	127 *	78-120	M1
1,1,1-Trichloroethane	<0.1131	25.00	33.46	134 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	30.02	120	75-120	
Carbon Tetrachloride	<0.1000	25.00	28.49	114	80-120	
1,2-Dichloroethane	<0.1000	25.00	28.46	114	74-120	
Benzene	<0.1000	25.00	30.68	123 *	77-120	M1
Trichloroethene	5.707	25.00	35.48	119	78-122	
1,2-Dichloropropane	<0.1000	25.00	29.60	118	76-120	
Bromodichloromethane	<0.1000	25.00	29.55	118	78-120	
Dibromomethane	<0.1000	25.00	27.92	112	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	24.57	98	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	30.17	121 *	76-120	M1
Toluene	<0.1000	25.00	26.99	108	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	24.78	99	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	28.16	113	76-120	
2-Hexanone	<2.000	25.00	21.41	86	57-121	
1,3-Dichloropropane	<0.1000	25.00	27.92	112	75-120	
Tetrachloroethene	0.2248	25.00	24.87	99	77-120	
Dibromochloromethane	<0.1000	25.00	25.99	104	76-120	
1,2-Dibromoethane	<0.1000	25.00	26.03	104	77-120	
Chlorobenzene	<0.1000	25.00	26.31	105	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	26.03	104	77-120	
Ethylbenzene	<0.1000	25.00	28.12	112	78-120	
m,p-Xylenes	<0.1594	50.00	53.64	107	77-120	
o-Xylene	<0.1000	25.00	25.92	104	77-120	
Styrene	<0.1000	25.00	26.66	107	77-120	
Bromoform	<0.2000	25.00	23.38	94	74-121	
Isopropylbenzene	<0.1000	25.00	25.58	102	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	27.93	112	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	31.07	124 *	72-120	M1
Propylbenzene	<0.1000	25.00	27.28	109	76-120	
Bromobenzene	<0.1000	25.00	27.60	110	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	30.44	122 *	77-120	M1
2-Chlorotoluene	<0.1000	25.00	30.20	121 *	76-120	M1
4-Chlorotoluene	<0.1000	25.00	28.09	112	78-120	
tert-Butylbenzene	<0.1000	25.00	23.93	96	76-120	
1,2,4-Trimethylbenzene	0.1004	25.00	31.62	126 *	77-120	M1
sec-Butylbenzene	<0.1029	25.00	24.51	98	80-120	
para-Isopropyl Toluene	<0.1000	25.00	26.92	108	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	26.33	105	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	25.48	102	77-120	
n-Butylbenzene	<0.1285	25.00	41.24 b	165 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	26.63	107	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	27.02	108	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	27.09	108	73-121	
Hexachlorobutadiene	<0.4000	25.00	23.22	93	73-123	
Naphthalene	<0.4000	25.00	30.87	123 *	62-121	M1
1,2,3-Trichlorobenzene	<0.1149	25.00	28.56	114	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	110	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC513654

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	32.90 b	132	56-140	12	24	V3
Chloromethane	25.00	32.52	130	46-142	14	24	
Vinyl Chloride	25.00	33.30	128	49-136	14	24	
Bromomethane	25.00	32.65 b	131	42-154	9	24	V3
Chloroethane	25.00	29.11	116	51-133	15	25	
Trichlorofluoromethane	25.00	27.04	108	63-135	17	20	
Iodomethane	25.00	34.41 b	138	60-140	11	30	V3
Acetone	25.00	27.05	108	48-130	6	41	
1,1-Dichloroethene	25.00	27.64	109	68-133	17	20	
Methylene Chloride	25.00	27.74	110	71-120	14	20	
Carbon Disulfide	25.00	26.46	106	56-120	18	20	
MTBE	25.00	32.36	111	58-120	9	21	
trans-1,2-Dichloroethene	25.00	29.14	117	80-120	16	24	
Vinyl Acetate	25.00	22.04	88	63-124	15	24	
1,1-Dichloroethane	25.00	36.59	110	77-120	17	20	
2-Butanone	25.00	25.98	104	57-120	15	32	
cis-1,2-Dichloroethene	25.00	29.50	110	75-120	15	20	
2,2-Dichloropropane	25.00	25.17	101	72-128	19	24	
Chloroform	25.00	26.65	106	78-120	18	20	
Bromochloromethane	25.00	27.41	110	78-120	15	20	
1,1,1-Trichloroethane	25.00	28.16	113	78-120	17	20	
1,1-Dichloropropene	25.00	25.20	101	75-120	17	21	
Carbon Tetrachloride	25.00	23.84	95	80-120	18	21	
1,2-Dichloroethane	25.00	24.06	96	74-120	17	20	
Benzene	25.00	25.97	104	77-120	17	20	
Trichloroethene	25.00	30.85	101	78-122	14	20	
1,2-Dichloropropane	25.00	25.26	101	76-120	16	20	
Bromodichloromethane	25.00	25.03	100	78-120	17	20	
Dibromomethane	25.00	24.49	98	77-120	13	20	
4-Methyl-2-Pentanone	25.00	22.19	89	65-120	10	22	
cis-1,3-Dichloropropene	25.00	26.13	105	76-120	14	20	
Toluene	25.00	23.12	92	73-120	15	20	
trans-1,3-Dichloropropene	25.00	21.54	86	72-120	14	20	
1,1,2-Trichloroethane	25.00	24.26	97	76-120	15	20	
2-Hexanone	25.00	19.45	78	57-121	10	25	
1,3-Dichloropropane	25.00	24.58	98	75-120	13	20	
Tetrachloroethene	25.00	21.32	84	77-120	15	20	
Dibromochloromethane	25.00	22.89	92	76-120	13	20	
1,2-Dibromoethane	25.00	23.38	94	77-120	11	20	
Chlorobenzene	25.00	22.74	91	78-120	15	20	
1,1,1,2-Tetrachloroethane	25.00	22.31	89	77-120	15	20	
Ethylbenzene	25.00	23.92	96	78-120	16	26	
m,p-Xylenes	50.00	45.00	90	77-120	18	20	
o-Xylene	25.00	21.82	87	77-120	17	20	
Styrene	25.00	22.43	90	77-120	17	20	
Bromoform	25.00	20.95	84	74-121	11	21	
Isopropylbenzene	25.00	22.16	89	71-120	14	20	
1,1,2,2-Tetrachloroethane	25.00	25.82	103	73-120	8	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	214925	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-46B-9C1	Batch#:	155309
MSS Lab ID:	214922-002	Sampled:	09/15/09
Matrix:	Water	Received:	09/16/09
Units:	ug/L	Analyzed:	09/25/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	28.67	115	72-120	8	20	
Propylbenzene	25.00	23.14	93	76-120	16	20	
Bromobenzene	25.00	24.68	99	75-120	11	20	
1,3,5-Trimethylbenzene	25.00	26.51	106	77-120	14	20	
2-Chlorotoluene	25.00	26.13	105	76-120	14	20	
4-Chlorotoluene	25.00	24.14	97	78-120	15	20	
tert-Butylbenzene	25.00	20.54	82	76-120	15	21	
1,2,4-Trimethylbenzene	25.00	27.87	111	77-120	13	20	
sec-Butylbenzene	25.00	21.12	84	80-120	15	21	
para-Isopropyl Toluene	25.00	23.46	94	76-120	14	20	
1,3-Dichlorobenzene	25.00	22.75	91	75-120	15	20	
1,4-Dichlorobenzene	25.00	22.26	89	77-120	13	23	
n-Butylbenzene	25.00	33.82 b	135 *	76-120	20	21	M1 V3
1,2-Dichlorobenzene	25.00	23.46	94	76-120	13	20	
1,2-Dibromo-3-Chloropropane	25.00	24.54	98	65-120	10	22	
1,2,4-Trichlorobenzene	25.00	24.37	97	73-121	11	20	
Hexachlorobutadiene	25.00	20.62	82	73-123	12	25	
Naphthalene	25.00	28.71	115	62-121	7	32	
1,2,3-Trichlorobenzene	25.00	26.11	104	66-123	9	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	111	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	112	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 214925 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 214925 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839384947003 File : kio03 Time : 24-SEP-2009 08:23

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	15064	16.59	
75	30% - 60% of mass 95	42960	47.30	
95		90829	100.00	
96	5% - 9% of mass 95	6194	6.82	
173	< 2% of mass 174	118	0.18	
174	> 50% and < 100% of mass 95	64893	71.45	
175	5% - 9% of mass 174	4914	7.57	
176	> 95% and < 101% of mass 174	63775	98.28	
177	5% - 9% of mass 176	4504	7.06	

Analyst: BO Date: 09/24/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS BFB TUNE FOR 214925 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839386393006 File : kip06 Time : 25-SEP-2009 09:38

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	16216	15.87	
75	30% - 60% of mass 95	48227	47.21	
95		102152	100.00	
96	5% - 9% of mass 95	7663	7.50	
173	< 2% of mass 174	316	0.42	
174	> 50% and < 100% of mass 95	75722	74.13	
175	5% - 9% of mass 174	5360	7.08	
176	> 95% and < 101% of mass 174	73865	97.55	
177	5% - 9% of mass 176	4860	6.58	

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 214925 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 214925 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 214925 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : 20PPB IDF : 1.0
Seqnum : 839384947004.1 File : kio04 Time : 24-SEP-2009 08:35
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12998 (25000X), S12773 (25000X), S12217 (50000X), S12929 (25000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5606	20.00	20.94	ug/L	5	20	0.0500	
Chloromethane	0.5160	0.4682	20.00	18.15	ug/L	-9	20	0.1000	
Vinyl Chloride	0.5175	0.5437	20.00	21.01	ug/L	5	20	0.0500	
Bromomethane	0.2608	0.2378	20.00	18.23	ug/L	-9	20	0.0500	
Chloroethane	0.4094	0.4106	20.00	20.06	ug/L	0	20	0.0500	
Trichlorofluoromethane	0.7415	0.7074	20.00	19.08	ug/L	-5	20	0.0500	
Acetone	0.1382	0.1313	20.00	19.00	ug/L	-5	20	0.0500	
1,1-Dichloroethene	0.3747	0.3961	20.00	21.14	ug/L	6	20	0.0500	
Iodomethane	0.2599	0.1715	20.00	14.36	ug/L	**-28**	20	0.0500	c- ***
Methylene Chloride	0.5280	0.5328	20.00	20.18	ug/L	1	20	0.0500	
Carbon Disulfide	1.4090	1.7365	20.00	24.65	ug/L	**23**	20	0.0500	c+ ***
MTBE	1.5447	1.6153	20.00	20.91	ug/L	5	20	0.0500	
trans-1,2-Dichloroethene	0.4564	0.4920	20.00	21.56	ug/L	8	20	0.0500	
Vinyl Acetate	0.9726	0.9666	20.00	19.87	ug/L	-1	20	0.0500	
1,1-Dichloroethane	0.9405	1.0020	20.00	21.31	ug/L	7	20	0.1000	
2-Butanone	0.2331	0.2247	20.00	19.28	ug/L	-4	20	0.0500	
2,2-Dichloropropane	0.7134	0.7830	20.00	21.95	ug/L	10	20	0.0500	
cis-1,2-Dichloroethene	0.5440	0.5687	20.00	20.90	ug/L	5	20	0.0500	
Chloroform	0.9238	0.8918	20.00	19.31	ug/L	-3	20	0.0500	
Bromochloromethane	0.2354	0.2479	20.00	21.06	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7032	0.7334	20.00	20.86	ug/L	4	20	0.0500	
1,1-Dichloropropene	0.4217	0.4092	20.00	19.41	ug/L	-3	20	0.0500	
Carbon Tetrachloride	0.3483	0.3245	20.00	18.63	ug/L	-7	20	0.0500	
1,2-Dichloroethane	0.4392	0.3850	20.00	17.53	ug/L	-12	20	0.0500	
Benzene	1.3404	1.3431	20.00	20.04	ug/L	0	20	0.0500	
Trichloroethene	0.3158	0.3120	20.00	19.76	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3595	0.3460	20.00	19.25	ug/L	-4	20	0.0500	
Bromodichloromethane	0.3863	0.3601	20.00	18.64	ug/L	-7	20	0.0500	
Dibromomethane	0.1802	0.1684	20.00	18.69	ug/L	-7	20	0.0500	
4-Methyl-2-Pentanone	0.3044	0.2467	20.00	16.21	ug/L	-19	20	0.0500	
cis-1,3-Dichloropropene	0.5168	0.5032	20.00	19.47	ug/L	-3	20	0.0500	
Toluene	0.9593	0.9012	20.00	18.79	ug/L	-6	20	0.0500	
trans-1,3-Dichloropropene	0.5730	0.5235	20.00	18.27	ug/L	-9	20	0.0500	
1,1,2-Trichloroethane	0.1749	0.1638	20.00	18.73	ug/L	-6	20	0.0500	
2-Hexanone	0.2445	0.1759	20.00	14.39	ug/L	**-28**	20	0.0500	c- ***
1,3-Dichloropropane	0.6133	0.5711	20.00	18.62	ug/L	-7	20	0.0500	
Tetrachloroethene	0.3329	0.2956	20.00	17.76	ug/L	-11	20	0.0500	
Dibromochloromethane	0.3027	0.2666	20.00	17.61	ug/L	-12	20	0.0500	
1,2-Dibromoethane	0.3049	0.2764	20.00	18.13	ug/L	-9	20	0.0500	
Chlorobenzene	1.0519	0.9667	20.00	18.38	ug/L	-8	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3358	0.3010	20.00	17.93	ug/L	-10	20	0.0500	
Ethylbenzene	1.8115	1.6984	20.00	18.75	ug/L	-6	20	0.0500	
m,p-Xylenes	0.6304	0.5826	40.00	36.97	ug/L	-8	20	0.0500	
o-Xylene	0.6283	0.5592	20.00	17.80	ug/L	-11	20	0.0500	
Styrene	1.0367	0.9263	20.00	17.87	ug/L	-11	20	0.0500	
Bromoform	0.1849	0.1728	20.00	16.56	ug/L	-17	20	0.1000	
Isopropylbenzene	3.8595	3.9015	20.00	20.22	ug/L	1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9033	20.00	18.84	ug/L	-6	20	0.3000	
1,2,3-Trichloropropane	1.0234	1.0642	20.00	20.80	ug/L	4	20	0.0500	
Propylbenzene	3.9448	3.7339	20.00	18.93	ug/L	-5	20	0.0500	
Bromobenzene	1.0220	0.9942	20.00	19.46	ug/L	-3	20	0.0500	
1,3,5-Trimethylbenzene	2.7424	2.8391	20.00	20.71	ug/L	4	20	0.0500	
2-Chlorotoluene	3.1099	3.1575	20.00	20.31	ug/L	2	20	0.0500	
4-Chlorotoluene	2.6572	2.5853	20.00	19.46	ug/L	-3	20	0.0500	
tert-Butylbenzene	2.1712	1.8204	20.00	16.77	ug/L	-16	20	0.0500	
1,2,4-Trimethylbenzene	2.6384	2.7441	20.00	20.80	ug/L	4	20	0.0500	
sec-Butylbenzene	3.1284	2.6670	20.00	17.05	ug/L	-15	20	0.0500	
para-Isopropyl Toluene	2.4941	2.3643	20.00	18.96	ug/L	-5	20	0.0500	
1,3-Dichlorobenzene	1.6902	1.5907	20.00	18.82	ug/L	-6	20	0.0500	
1,4-Dichlorobenzene	1.6542	1.4979	20.00	18.11	ug/L	-9	20	0.0500	
n-Butylbenzene	2.4331	2.4949	20.00	23.23	ug/L	16	20	0.0500	
1,2-Dichlorobenzene	1.6119	1.5164	20.00	18.82	ug/L	-6	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1759	0.1530	20.00	17.40	ug/L	-13	20	0.0500	
1,2,4-Trichlorobenzene	1.0876	1.0272	20.00	18.89	ug/L	-6	20	0.0500	
Hexachlorobutadiene	0.4373	0.3685	20.00	16.85	ug/L	-16	20	0.0500	
Naphthalene	2.7279	2.6829	20.00	19.67	ug/L	-2	20	0.0500	
1,2,3-Trichlorobenzene	1.0079	0.9464	20.00	18.78	ug/L	-6	20	0.0500	
Dibromofluoromethane	0.4472	0.4681	50.00	52.34	ug/L	5	20	0.0500	
1,2-Dichloroethane-d4	0.3737	0.3401	50.00	45.50	ug/L	-9	20	0.0500	
Toluene-d8	1.4811	1.5309	50.00	51.68	ug/L	3	20	0.0500	
Bromofluorobenzene	1.2424	1.3371	50.00	53.81	ug/L	8	20	0.0500	

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2023195	34.40	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3626419	48.20	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3229199	51.17	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1169850	18.95	17.10	17.10	0.00

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 214925 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513643 IDF : 1.0
Seqnum : 839386393008.5 File : kip08 Time : 25-SEP-2009 10:31
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.7023	25.00	32.79	ug/L	**31**	20	0.0500	c+ u ***
Chloromethane	0.5160	0.5820	25.00	28.19	ug/L	13	20	0.1000	u
Vinyl Chloride	0.5175	0.6171	25.00	29.81	ug/L	19	20	0.0500	u
Bromomethane	0.2608	0.3405	25.00	32.65	ug/L	**31**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4710	25.00	28.76	ug/L	15	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8096	25.00	27.30	ug/L	9	20	0.0500	u
Iodomethane	0.2599	0.3862	25.00	35.57	ug/L	**42**	20	0.0500	c+ u ***
Acetone	0.1382	0.1496	25.00	27.07	ug/L	8	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4193	25.00	27.97	ug/L	12	20	0.0500	u
Methylene Chloride	0.5280	0.5922	25.00	28.04	ug/L	12	20	0.0500	u
Carbon Disulfide	1.4090	1.5022	25.00	26.65	ug/L	7	20	0.0500	u
MTBE	1.5447	1.6190	25.00	26.20	ug/L	5	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5462	25.00	29.92	ug/L	20	20	0.0500	u
Vinyl Acetate	0.9726	0.9039	25.00	23.23	ug/L	-7	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0455	25.00	27.79	ug/L	11	20	0.1000	u
2-Butanone	0.2331	0.2372	25.00	25.44	ug/L	2	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6218	25.00	28.57	ug/L	14	20	0.0500	u
2,2-Dichloropropane	0.7134	0.7917	25.00	27.74	ug/L	11	20	0.0500	u
Chloroform	0.9238	0.9545	25.00	25.83	ug/L	3	20	0.0500	u
Bromochloromethane	0.2354	0.2663	25.00	28.27	ug/L	13	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.7373	25.00	26.21	ug/L	5	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4289	25.00	25.43	ug/L	2	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3288	25.00	23.59	ug/L	-6	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4044	25.00	23.02	ug/L	-8	20	0.0500	u
Benzene	1.3404	1.4552	25.00	27.14	ug/L	9	20	0.0500	u
Trichloroethene	0.3158	0.3385	25.00	26.80	ug/L	7	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3702	25.00	25.75	ug/L	3	20	0.0500	u
Bromodichloromethane	0.3863	0.3954	25.00	25.59	ug/L	2	20	0.0500	u
Dibromomethane	0.1802	0.1825	25.00	25.33	ug/L	1	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2629	25.00	21.59	ug/L	-14	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5727	25.00	27.70	ug/L	11	20	0.0500	u
Toluene	0.9593	0.9748	25.00	25.40	ug/L	2	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5338	25.00	23.29	ug/L	-7	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1795	25.00	25.65	ug/L	3	20	0.0500	u
2-Hexanone	0.2445	0.2126	25.00	21.73	ug/L	-13	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6241	25.00	25.44	ug/L	2	20	0.0500	u
Tetrachloroethene	0.3329	0.3131	25.00	23.52	ug/L	-6	20	0.0500	u
Dibromochloromethane	0.3027	0.2969	25.00	24.52	ug/L	-2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3059	25.00	25.08	ug/L	0	20	0.0500	u
Chlorobenzene	1.0519	1.0573	25.00	25.13	ug/L	1	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3248	25.00	24.18	ug/L	-3	20	0.0500	u
Ethylbenzene	1.8115	1.8631	25.00	25.71	ug/L	3	20	0.0500	u
m,p-Xylenes	0.6304	0.6492	50.00	51.49	ug/L	3	20	0.0500	u
o-Xylene	0.6283	0.6247	25.00	24.86	ug/L	-1	20	0.0500	u
Styrene	1.0367	1.0737	25.00	25.89	ug/L	4	20	0.0500	u
Bromoform	0.1849	0.1942	25.00	22.75	ug/L	-9	20	0.1000	u
Isopropylbenzene	3.8595	3.7225	25.00	24.11	ug/L	-4	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9682	25.00	25.25	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1592	25.00	28.32	ug/L	13	20	0.0500	u
Propylbenzene	3.9448	4.0402	25.00	25.60	ug/L	2	20	0.0500	u
Bromobenzene	1.0220	1.0904	25.00	26.67	ug/L	7	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.0924	25.00	28.19	ug/L	13	20	0.0500	u
2-Chlorotoluene	3.1099	3.4796	25.00	27.97	ug/L	12	20	0.0500	u
4-Chlorotoluene	2.6572	2.8402	25.00	26.72	ug/L	7	20	0.0500	u
tert-Butylbenzene	2.1712	1.9832	25.00	22.84	ug/L	-9	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.0381	25.00	28.79	ug/L	15	20	0.0500	u
sec-Butylbenzene	3.1284	2.8363	25.00	22.67	ug/L	-9	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.4523	25.00	24.58	ug/L	-2	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.7399	25.00	25.74	ug/L	3	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6579	25.00	25.06	ug/L	0	20	0.0500	u
n-Butylbenzene	2.4331	2.7417	25.00	35.59	ug/L	**42**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6616	25.00	25.77	ug/L	3	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1762	25.00	25.05	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.1308	25.00	25.99	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.4373	0.3796	25.00	21.70	ug/L	-13	20	0.0500	u
Naphthalene	2.7279	3.1829	25.00	29.17	ug/L	17	20	0.0500	u
1,2,3-Trichlorobenzene	1.0079	1.0957	25.00	27.18	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.4472	0.4644	50.00	51.92	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3362	50.00	44.98	ug/L	-10	20	0.0500	u
Toluene-d8	1.4811	1.5250	50.00	51.48	ug/L	3	20	0.0500	u
Bromofluorobenzene	1.2424	1.3301	50.00	53.53	ug/L	7	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2278668	51.38	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	4073965	66.49	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3650497	70.89	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1325276	34.76	17.10	17.10	0.00

BO 09/25/09 : STD ID fixed in LIMS [general version]

BO 09/25/09 : Changed type in LIMS [general version]

DNT 09/28/09 [Iodomethane]: Fails high; ND in samples.

DNT 09/28/09 [n-Butylbenzene]: Fails high; ND in samples.

Analyst: DNT Date: 09/28/09 Reviewer: LW Date: 09/29/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839384947

Date : 09/24/09 Reference : kif12
Sequence : MSVOA11 kio Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
004	CCV	20PPB	2023195	10.81	3626419	11.74	3229199	14.82	1169850	17.10
005	LCS	QC513420	2112696	10.81	3768449	11.74	3368802	14.82	1210453	17.10
007	BLANK	QC513421	2025084	10.81	3680944	11.74	3203631	14.82	908846	17.10
008	SAMPLE	214846-004	1992125	10.81	3621127	11.74	3128023	14.82	874752	17.10
009	SAMPLE	214923-001	1960707	10.81	3595872	11.74	3134551	14.82	915798	17.10
010	SAMPLE	214925-001	1937366	10.81	3518440	11.74	3052949	14.82	910466	17.10
011	SAMPLE	214925-002	1890776	10.81	3452739	11.74	3021064	14.82	890627	17.10
012	SAMPLE	214925-003	1895761	10.81	3472412	11.74	3042141	14.82	889331	17.10
013	SAMPLE	214851-007	1853075	10.81	3375729	11.74	2944011	14.82	833705	17.10
014	MSS	214851-009	1815418	10.81	3338931	11.74	2907777	14.82	803281	17.10
015	SAMPLE	214851-014	1776925	10.81	3284359	11.74	2836894	14.83	707819	17.10
016	SAMPLE	214851-015	1765596	10.81	3232591	11.74	2839598	14.82	862721	17.10
017	SAMPLE	214851-016	1748290	10.81	3207825	11.74	2819199	14.82	800539	17.10
018	SAMPLE	214851-017	1764402	10.81	3240786	11.74	2833372	14.82	835162	17.10
019	SAMPLE	214923-002	1747667	10.81	3222900	11.74	2824539	14.82	792718	17.10
020	SAMPLE	214923-003	1741349	10.81	3200791	11.74	2808524	14.82	848812	17.10
021	SAMPLE	214923-004	1701028	10.81	3140747	11.74	2771128	14.82	834747	17.10
022	SAMPLE	214923-006	1727967	10.81	3177999	11.74	2796076	14.82	809481	17.10
023	SAMPLE	214923-007	1683834	10.81	3140994	11.74	2732858	14.83	729121	17.10
024	SAMPLE	214923-008	1695791	10.81	3134514	11.74	2779820	14.82	810886	17.10
025	SAMPLE	214923-009	1698480	10.81	3120978	11.74	2773825	14.82	804161	17.10
026	SAMPLE	214923-005	1760216	10.81	3217193	11.74	2851643	14.82	782655	17.10
027	MS	QC513430	1786851	10.81	3276571	11.74	2991541	14.82	1139354	17.10
028	MSD	QC513431	1943151	10.81	3515341	11.74	3201861	14.82	1187919	17.10

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839386393

Date : 09/25/09 Reference : kif12
Sequence : MSVOA11 kip Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
008	CCV/LCS	QC513643	2278668	10.81	4073965	11.74	3650497	14.82	1325276	17.10
010	BLANK	QC513644	2138347	10.81	3937662	11.74	3415858	14.82	958926	17.10
011	SAMPLE	215139-004	2018314	10.81	3749582	11.74	3268096	14.82	1000302	17.10
012	SAMPLE	215157-002	1980455	10.81	3642457	11.74	3162028	14.82	930269	17.10
013	SAMPLE	215157-001	1901721	10.81	3572748	11.74	3128605	14.82	896362	17.10
014	SAMPLE	214922-001	1838597	10.81	3437362	11.74	3020405	14.82	900805	17.10
015	SAMPLE	214925-004	1789307	10.81	3346398	11.74	2956684	14.82	859160	17.10
016	SAMPLE	215157-001	1720358	10.81	3248603	11.74	2884113	14.82	814849	17.10
017	SAMPLE	214925-005	1714097	10.81	3202655	11.74	2833753	14.82	816620	17.10
018	SAMPLE	214925-006	1679206	10.81	3174104	11.74	2808232	14.82	823804	17.10
019	SAMPLE	214925-007	1642883	10.81	3092650	11.74	2728575	14.82	778397	17.10
020	SAMPLE	214925-008	1603067	10.81	3037259	11.74	2690063	14.82	744797	17.10
021	SAMPLE	214925-009	1560251	10.81	2968881	11.74	2647871	14.82	763493	17.10
022	SAMPLE	214925-010	1567569	10.81	2969915	11.74	2665048	14.82	753729	17.10
023	SAMPLE	214925-011	1529818	10.81	2911865	11.74	2589974	14.82	723320	17.10
024	SAMPLE	214925-012	1542860	10.81	2929540	11.74	2627493	14.82	742552	17.10
025	MSS	214922-002	1535968	10.81	2914874	11.74	2592237	14.82	777140	17.10
026	SAMPLE	214922-003	1522637	10.81	2888654	11.74	2556105	14.82	685011	17.10
027	SAMPLE	214922-004	1520466	10.81	2893132	11.74	2599053	14.82	736897	17.10
028	SAMPLE	214922-006	1514038	10.81	2884674	11.74	2587660	14.82	754203	17.10
029	SAMPLE	214923-006	1550460	10.81	2939938	11.74	2614137	14.82	767115	17.10
030	MS	QC513653	1560235	10.81	2931781	11.74	2724706	14.82	1003949	17.10
031	MSD	QC513654	1740157	10.81	3233665	11.74	2994197	14.82	1059377	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839384947

Instrument : MSVOA11 Begun : 09/24/09 07:47
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kio01	X	IB			09/24/09 07:47	1.0	1	
002	kio02	X	BFB			09/24/09 08:11	1.0	2	
003	kio03	TUN	BFB			09/24/09 08:23	1.0	2	
004	kio04	CCV	20PPB			09/24/09 08:35	1.0	3 4 5 6 1	
005	kio05	LCS	QC513420	Water	155248	09/24/09 09:13	1.0	7 8 9 10 1	
006	kio06	X	IB			09/24/09 09:41	1.0	1	
007	kio07	BLANK	QC513421	Water	155248	09/24/09 10:09	1.0	1	
008	kio08	SAMPLE	214846-004	Water	155248	09/24/09 10:38	1.0	1	
009	kio09	SAMPLE	214923-001	Water	155248	09/24/09 11:06	1.0	1	
010	kio10	SAMPLE	214925-001	Water	155248	09/24/09 11:34	1.0	1	
011	kio11	SAMPLE	214925-002	Water	155248	09/24/09 12:02	1.0	1	
012	kio12	SAMPLE	214925-003	Water	155248	09/24/09 12:30	1.0	1	
013	kio13	SAMPLE	214851-007	Water	155248	09/24/09 12:59	1.0	1	
014	kio14	MSS	214851-009	Water	155248	09/24/09 13:27	1.0	1	
015	kio15	SAMPLE	214851-014	Water	155248	09/24/09 13:55	1.0	1	
016	kio16	SAMPLE	214851-015	Water	155248	09/24/09 14:23	1.0	1	
017	kio17	SAMPLE	214851-016	Water	155248	09/24/09 14:52	1.0	1	
018	kio18	SAMPLE	214851-017	Water	155248	09/24/09 15:20	1.0	1	
019	kio19	SAMPLE	214923-002	Water	155248	09/24/09 15:48	1.0	1	
020	kio20	SAMPLE	214923-003	Water	155248	09/24/09 16:17	1.0	1	
021	kio21	SAMPLE	214923-004	Water	155248	09/24/09 16:45	1.0	1	
022	kio22	SAMPLE	214923-006	Water	155248	09/24/09 17:13	1.0	1	1:TCE=160
023	kio23	SAMPLE	214923-007	Water	155248	09/24/09 17:42	1.0	1	
024	kio24	SAMPLE	214923-008	Water	155248	09/24/09 18:10	1.0	1	
025	kio25	SAMPLE	214923-009	Water	155248	09/24/09 18:38	1.0	1	
026	kio26	SAMPLE	214923-005	Water	155248	09/24/09 19:07	2.0	1	
027	kio27	MS	QC513430	Water	155248	09/24/09 19:35	1.0	1 7 8 9 10	
028	kio28	MSD	QC513431	Water	155248	09/24/09 20:03	1.0	1 7 8 9 10	
029	kio29	X	IB			09/24/09 20:31	1.0	1	
030	kio30	X	IB			09/24/09 21:00	1.0	1	
031	kio31	X	IB			09/24/09 21:28	1.0	1	
032	kio32	X	IB			09/24/09 21:56	1.0	1	
033	kio33	X	IB			09/24/09 22:24	1.0	1	

BO 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/25/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839386393

Instrument : MSVOA11 Begun : 09/25/09 07:53
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kip01	X	IB			09/25/09 07:53	1.0	1	
002	kip02	X	BFB			09/25/09 08:22	1.0	2	
003	kip03	X	BFB			09/25/09 08:34	1.0	2	
004	kip04	X	BFB			09/25/09 08:48	1.0	2	
005	kip05	X	20PPB			09/25/09 09:05	1.0	3 4 5 6 1	
006	kip06	TUN	BFB			09/25/09 09:38	1.0	2	
007	kip07	X	20PPB			09/25/09 09:52	1.0	3 4 5 6 1	
008	kip08	CCV/LCS	QC513643	Water	155309	09/25/09 10:31	1.0	7 8 9 10 1	
009	kip09	X	IB			09/25/09 10:59	1.0	1	
010	kip10	BLANK	QC513644	Water	155309	09/25/09 11:27	1.0	1	
011	kip11	SAMPLE	215139-004	Water	155309	09/25/09 12:05	1.0	1	
012	kip12	SAMPLE	215157-002	Water	155309	09/25/09 12:33	1.0	1	
013	kip13	SAMPLE	215157-001	Water	155309	09/25/09 13:02	1.0	1	1:MTBE=150
014	kip14	SAMPLE	214922-001	Water	155309	09/25/09 13:30	1.0	1	
015	kip15	SAMPLE	214925-004	Water	155309	09/25/09 13:59	1.0	1	
016	kip16	SAMPLE	215157-001	Water	155309	09/25/09 14:27	5.0	1	
017	kip17	SAMPLE	214925-005	Water	155309	09/25/09 14:55	1.0	1	
018	kip18	SAMPLE	214925-006	Water	155309	09/25/09 15:24	1.0	1	
019	kip19	SAMPLE	214925-007	Water	155309	09/25/09 15:52	1.0	1	
020	kip20	SAMPLE	214925-008	Water	155309	09/25/09 16:20	1.0	1	
021	kip21	SAMPLE	214925-009	Water	155309	09/25/09 16:49	1.0	1	
022	kip22	SAMPLE	214925-010	Water	155309	09/25/09 17:17	1.0	1	
023	kip23	SAMPLE	214925-011	Water	155309	09/25/09 17:45	1.0	1	
024	kip24	SAMPLE	214925-012	Water	155309	09/25/09 18:14	1.0	1	
025	kip25	MSS	214922-002	Water	155309	09/25/09 18:42	1.0	1	
026	kip26	SAMPLE	214922-003	Water	155309	09/25/09 19:10	2.0	1	
027	kip27	SAMPLE	214922-004	Water	155309	09/25/09 19:39	2.0	1	
028	kip28	SAMPLE	214922-006	Water	155309	09/25/09 20:07	4.0	1	
029	kip29	SAMPLE	214923-006	Water	155309	09/25/09 20:35	5.0	1	
030	kip30	MS	QC513653	Water	155309	09/25/09 21:04	1.0	1 7 8 9 10	
031	kip31	MSD	QC513654	Water	155309	09/25/09 21:32	1.0	1 7 8 9 10	
032	kip32	X	IB			09/25/09 22:00	1.0	1	
033	kip33	X	IB			09/25/09 22:29	1.0	1	
034	kip34	X	IB			09/25/09 22:57	1.0	1	
035	kip35	X	IB			09/25/09 23:25	1.0	1	
036	kip36	X	IB			09/25/09 23:53	1.0	1	

BO 09/25/09 : kip04, kip06, adjusted tune

BO 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 36.

BO 09/25/09 : Sequence reviewed up to kip11

LW 09/25/09 : Sequence reviewed through kip11

Analyst: BO Date: 09/25/09 Reviewer: LW Date: 09/28/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12217 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

Page 1 of 1

GC/MS VOLATILE ORGANICS

Batch #: 155248

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments CH2MT4Z	Initials & Date
1	214846-4	C	<2	LV	1		11	MM 1X, B&BT, MTBE 76 on col hold 9/24, due 9/28	
2	214851-9	A			3			1X MSS	
3	-9	BCD						MS/MSD	
4	-14	A							
5	-15								
6	-16								
7	-17								
8	214923-1	A			4			TB	
9	-2							1X	
10	-3								
11	-4								
12	-5		<2			11		2X	
13	-6							1X	
14	-7								
15	-8								
16	-9								
17	214925-1	A			4			TB	
18	-2							1X	
19	-3								
20	-4		Z					PUT OFF	
21	214851-7	C	<2	LV			11	MM 1X, OD	
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155309

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	214923-6	B				2	11	MM 5x, TCE > UL hold 9/23	
2	215139-4	A	<2 ✓					TB	
3	215157-1	B	<2					1x	
4	-2	A						TB	
5	214925-5	A						1x	
6	-6								
7	-7								
8	-8								
9	-9								
10	-10								
11	-11								
12	-12								
13	214922-1	A						TB	
14	-2	A	✓					1x MS	
15	-2	B&D	<2					1x MS/MSD	
16	-3	A				3		2x	
17	-4					4		2x	
18	-5		2					1x PUT OFF	
19	-6		<2			6		4x	
20	-7	2	2					1x PUT OFF	
21	214925-4	A	<2				11	1x	
22	~~214~~								
23	215157-1	C	<2			4	11	MM 5x, MTBE > UL	
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 215063
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091609B	215063-001
ASE-83A-9C1	215063-002
ASE-83C-9C1	215063-003
ASE-83B-9C1	215063-004
PL-525-9C1	215063-005
ASE-42C-9C1	215063-006
ASE-82C-9C1	215063-007
PL-527-9C1	215063-008
ASE-22A-9C1	215063-009
ASE-22C-9C1	215063-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/02/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215063**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/18/09**
Samples Received:	**09/18/09**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 09/18/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics by GC/MS (EPA 8260B):

High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 09/09/09 02:42; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for acetone in the ICV analyzed 09/09/09 16:12; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for bromomethane in the CCV analyzed 09/29/09 11:51; this analyte met minimum response criteria, and affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for many analytes in the CCV analyzed 09/30/09 11:57; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for many analytes in the BS/BSD for batch 155421; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. High RPD was observed for bromomethane; this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for a number of analytes in the LCS for batch 155470; these analytes were not detected at or above the RL in the associated samples.

Low recoveries were observed for sec-butylbenzene and benzene in the MSD of ASE-108A-9C1 (lab # 215064-005); the LCS was within limits, and the associated RPDs were within limits. High recoveries were observed for a number of analytes in the MS/MSD of ASE-108A-9C1 (lab # 215064-005); the associated RPDs were within limits, and these analytes were not detected at

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215063**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/18/09**
Samples Received:	**09/18/09**

Volatile Organics by GC/MS (EPA 8260B):

or above the RL in the associated samples.

No other analytical problems were encountered.

Chain of Custody

215063

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		

Privileged & Confidential

Site Name: Sky Harbor
Location of Site: Phoenix, AZ
Phase:
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: M. Wise - D. Foehr → M. Hall
PO #: 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Full Report TAT: 14
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Drive

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	TB	--	--	TB-091609B	9/16/9	0004	BLKWATER	WATER	TB	1	--	--	X														
2	ASE-83A	--	115	ASE-83A-9C1	9/16/9	0036	GW	WATER	Reg	3	G	N	X														
3	ASE-83C	--	203	ASE-83C-9C1	9/16/9	0057	GW	WATER	Reg	3	G	N	X														
4	ASE-83B	--	158	ASE-83B-9C1	9/16/9	0137	GW	WATER	Reg	3	G	N	X														
5	PL-525	--	--	PL-525-9C1	9/16/9	0147	GW	WATER	Reg	3	G	N	X														
6	ASE-42C	--	89	ASE-42C-9C1	9/16/9	0218	GW	WATER	Reg	3	G	N	X														
7	ASE-82C	--	198	ASE-82C-9C1	9/16/9	0246	GW	WATER	REG	3	G	N	X														
8	PL-527	--	--	PL-527-9C1	9/16/9	0252	BLKWATER	WATER	EB	3	G	N	X														
9	ASE-22A	--	91	ASE-22A-9C1	9/16/9	0348	GW	WATER	reg	3	G	N	X														
10	ASE-22C	--	157	ASE-22C-9C1	9/16/9	0440	GW	WATER	Reg	3	G	N	X														
11																											
12																											

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
	H+A	09/17/09 16:00		FedEx	09/17/09 16:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
				CAT	9/18/09	Good	3.4/2.6	YES

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 215063 Date Received 9/18/09 Number of coolers 2
Client CH2M HILL Project SFY HARBOR

Date Opened 9/18/09 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in 9/21/09 By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info FEDEX 795504267675 / 842193543050
2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name UNBREAKABLE Date 9/17/09
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.4, 2.6

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
    If YES, Who was called? By Date:

COMMENTS
TB 1 VOA w/ BUBBLE

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1

Rev. 6 Number 1 of 3
Effective: 23 July 2008
Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc

Laboratory Job Number 215063

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091609B	Batch#:	155421
Lab ID:	215063-001	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091609B	Batch#:	155421
Lab ID:	215063-001	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-83A-9C1	Batch#:	155421
Lab ID:	215063-002	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	3.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-83A-9C1	Batch#:	155421
Lab ID:	215063-002	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-83C-9C1	Batch#:	155421
Lab ID:	215063-003	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	3.3	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	2.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	2.2	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	6.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-83C-9C1	Batch#:	155421
Lab ID:	215063-003	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-83B-9C1	Batch#:	155421
Lab ID:	215063-004	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	5.3	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	16	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	5.3	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	17	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	8.2	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	20	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.8	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-83B-9C1	Batch#:	155421
Lab ID:	215063-004	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-525-9C1	Batch#:	155421
Lab ID:	215063-005	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	5.3	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	17	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	5.2	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	18	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	8.2	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	20	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.8	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-525-9C1	Batch#:	155421
Lab ID:	215063-005	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-42C-9C1	Batch#:	155421
Lab ID:	215063-006	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	9.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	14	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	5.8	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	2.1	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	18	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	1.6	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-42C-9C1	Batch#:	155421
Lab ID:	215063-006	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	1.5	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-82C-9C1	Batch#:	155421
Lab ID:	215063-007	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	22	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	3.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	4.7	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	3.2	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	37	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-82C-9C1	Batch#:	155421
Lab ID:	215063-007	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-527-9C1	Batch#:	155470
Lab ID:	215063-008	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	72	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-527-9C1	Batch#:	155470
Lab ID:	215063-008	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	90	83-125	
Bromofluorobenzene	90	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22A-9C1	Batch#:	155470
Lab ID:	215063-009	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	5.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	6.4	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	4.4	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.0	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	29	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22A-9C1	Batch#:	155470
Lab ID:	215063-009	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	90	83-125	
Bromofluorobenzene	91	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22C-9C1	Batch#:	155470
Lab ID:	215063-010	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	4.4	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.2	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	71	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22C-9C1	Batch#:	155470
Lab ID:	215063-010	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	90	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514128	Batch#:	155421
Matrix:	Water	Analyzed:	09/29/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514128	Batch#:	155421
Matrix:	Water	Analyzed:	09/29/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	115	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514129

Analyte	Spiked	Result		%REC		Limits	ADEQ Flags
Freon 12	18.75	25.90	b	138		56-140	V3
Chloromethane	18.75	17.08		91		46-142	
Vinyl Chloride	18.75	19.31		103		49-136	
Bromomethane	18.75	11.68	b	62		42-154	V9
Chloroethane	18.75	19.51		104		51-133	
Trichlorofluoromethane	18.75	22.89	b	122		63-135	V3
Iodomethane	18.75	15.40	b	82		70-130	
Acetone	18.75	19.59	b	104		48-130	
1,1-Dichloroethene	18.75	20.99		112		68-133	
Methylene Chloride	18.75	19.65		105		71-120	
Carbon Disulfide	18.75	18.57		99		56-120	
MTBE	18.75	18.92		101		58-120	
trans-1,2-Dichloroethene	18.75	21.40		114		80-120	
Vinyl Acetate	18.75	28.50	b	152	*	63-124	L1 R2 V3
1,1-Dichloroethane	18.75	20.88		111		77-120	
2-Butanone	18.75	19.28		103		57-120	
cis-1,2-Dichloroethene	18.75	20.16		108		75-120	
2,2-Dichloropropane	18.75	29.36	b	157	*	72-128	L1 V3
Chloroform	18.75	20.49		109		78-120	
Bromochloromethane	18.75	21.05		112		78-120	
1,1,1-Trichloroethane	18.75	23.09	b	123	*	78-120	L1 V3
1,1-Dichloropropene	18.75	23.29	b	124	*	75-120	L1 V3
Carbon Tetrachloride	18.75	23.89	b	127	*	80-120	L1 V3
1,2-Dichloroethane	18.75	21.63		115		74-120	
Benzene	18.75	20.98		112		77-120	
Trichloroethene	18.75	20.31		108		78-122	
1,2-Dichloropropane	18.75	20.49		109		76-120	
Bromodichloromethane	18.75	21.17		113		78-120	
Dibromomethane	18.75	20.81		111		77-120	
4-Methyl-2-Pentanone	18.75	20.61		110		65-120	
cis-1,3-Dichloropropene	18.75	22.64	b	121	*	76-120	L1 V3
Toluene	18.75	19.78		105		73-120	
trans-1,3-Dichloropropene	18.75	20.50		109		72-120	
1,1,2-Trichloroethane	18.75	21.44		114		76-120	
2-Hexanone	18.75	20.31		108		57-121	
1,3-Dichloropropane	18.75	21.61		115		75-120	
Tetrachloroethene	18.75	22.40		119		77-120	
Dibromochloromethane	18.75	21.32		114		76-120	
1,2-Dibromoethane	18.75	21.19		113		77-120	
Chlorobenzene	18.75	20.67		110		78-120	
1,1,1,2-Tetrachloroethane	18.75	21.44		114		77-120	
Ethylbenzene	18.75	21.44		114		78-120	
m,p-Xylenes	37.50	42.22		113		77-120	
o-Xylene	18.75	20.52		109		77-120	
Styrene	18.75	20.64		110		77-120	
Bromoform	18.75	20.57		110		74-121	
Isopropylbenzene	18.75	19.16		102		71-120	
1,1,2,2-Tetrachloroethane	18.75	22.66	b	121	*	73-120	L1 V3
1,2,3-Trichloropropane	18.75	21.57		115		72-120	
Propylbenzene	18.75	22.34		119		76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	18.75	20.77	111	75-120	
1,3,5-Trimethylbenzene	18.75	21.90	117	77-120	
2-Chlorotoluene	18.75	21.69	116	76-120	
4-Chlorotoluene	18.75	20.86	111	78-120	
tert-Butylbenzene	18.75	22.15	118	76-120	
1,2,4-Trimethylbenzene	18.75	21.07	112	77-120	
sec-Butylbenzene	18.75	23.06 b	123 *	80-120	L1 V3
para-Isopropyl Toluene	18.75	21.63	115	76-120	
1,3-Dichlorobenzene	18.75	20.56	110	75-120	
1,4-Dichlorobenzene	18.75	20.51	109	77-120	
n-Butylbenzene	18.75	23.74 b	127 *	76-120	L1 V3
1,2-Dichlorobenzene	18.75	20.61	110	76-120	
1,2-Dibromo-3-Chloropropane	18.75	20.73	111	65-120	
1,2,4-Trichlorobenzene	18.75	19.54	104	73-121	
Hexachlorobutadiene	18.75	22.76 b	121	73-123	V3
Naphthalene	18.75	21.57	115	62-121	
1,2,3-Trichlorobenzene	18.75	20.64	110	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514130

Analyte	Spiked	Result		%REC		Limits	RPD		Lim	ADEQ Flags
Freon 12	18.75	25.79	b	138		56-140	0		24	V3
Chloromethane	18.75	17.86		95		46-142	4		24	
Vinyl Chloride	18.75	20.07		107		49-136	4		24	
Bromomethane	18.75	14.99	b	80		42-154	25	*	24	R7 V9
Chloroethane	18.75	19.93		106		51-133	2		25	
Trichlorofluoromethane	18.75	23.62	b	126		63-135	3		20	V3
Iodomethane	18.75	15.96	b	85		70-130	4		20	
Acetone	18.75	18.34	b	98		48-130	7		41	
1,1-Dichloroethene	18.75	19.03		101		68-133	10		20	
Methylene Chloride	18.75	17.87		95		71-120	9		20	
Carbon Disulfide	18.75	17.18		92		56-120	8		20	
MTBE	18.75	18.65		99		58-120	1		21	
trans-1,2-Dichloroethene	18.75	19.43		104		80-120	10		24	
Vinyl Acetate	18.75	24.61	b	131	*	63-124	15		24	L1 R2 V3
1,1-Dichloroethane	18.75	19.48		104		77-120	7		20	
2-Butanone	18.75	17.91		96		57-120	7		32	
cis-1,2-Dichloroethene	18.75	18.53		99		75-120	8		20	
2,2-Dichloropropane	18.75	26.63	b	142	*	72-128	10		24	L1 V3
Chloroform	18.75	19.30		103		78-120	6		20	
Bromochloromethane	18.75	19.10		102		78-120	10		20	
1,1,1-Trichloroethane	18.75	21.39	b	114		78-120	8		20	V3
1,1-Dichloropropene	18.75	21.43	b	114		75-120	8		21	V3
Carbon Tetrachloride	18.75	22.49	b	120		80-120	6		21	V3
1,2-Dichloroethane	18.75	20.05		107		74-120	8		20	
Benzene	18.75	19.27		103		77-120	8		20	
Trichloroethene	18.75	18.67		100		78-122	8		20	
1,2-Dichloropropane	18.75	18.89		101		76-120	8		20	
Bromodichloromethane	18.75	19.70		105		78-120	7		20	
Dibromomethane	18.75	19.40		103		77-120	7		20	
4-Methyl-2-Pentanone	18.75	18.15		97		65-120	13		22	
cis-1,3-Dichloropropene	18.75	20.75	b	111		76-120	9		20	V3
Toluene	18.75	18.46		98		73-120	7		20	
trans-1,3-Dichloropropene	18.75	18.65		99		72-120	9		20	
1,1,2-Trichloroethane	18.75	19.72		105		76-120	8		20	
2-Hexanone	18.75	19.09		102		57-121	6		25	
1,3-Dichloropropane	18.75	19.68		105		75-120	9		20	
Tetrachloroethene	18.75	21.41		114		77-120	5		20	
Dibromochloromethane	18.75	19.72		105		76-120	8		20	
1,2-Dibromoethane	18.75	19.34		103		77-120	9		20	
Chlorobenzene	18.75	19.39		103		78-120	6		20	
1,1,1,2-Tetrachloroethane	18.75	20.10		107		77-120	6		20	
Ethylbenzene	18.75	20.09		107		78-120	7		26	
m,p-Xylenes	37.50	39.43		105		77-120	7		20	
o-Xylene	18.75	19.37		103		77-120	6		20	
Styrene	18.75	19.46		104		77-120	6		20	
Bromoform	18.75	18.95		101		74-121	8		21	
Isopropylbenzene	18.75	18.09		96		71-120	6		20	
1,1,2,2-Tetrachloroethane	18.75	20.26	b	108		73-120	11		20	V3
1,2,3-Trichloropropane	18.75	19.32		103		72-120	11		20	
Propylbenzene	18.75	20.69		110		76-120	8		20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	18.75	19.47	104	75-120	6	20	
1,3,5-Trimethylbenzene	18.75	20.61	110	77-120	6	20	
2-Chlorotoluene	18.75	20.02	107	76-120	8	20	
4-Chlorotoluene	18.75	19.33	103	78-120	8	20	
tert-Butylbenzene	18.75	20.81	111	76-120	6	21	
1,2,4-Trimethylbenzene	18.75	19.75	105	77-120	6	20	
sec-Butylbenzene	18.75	21.60 b	115	80-120	7	21	V3
para-Isopropyl Toluene	18.75	20.22	108	76-120	7	20	
1,3-Dichlorobenzene	18.75	19.45	104	75-120	6	20	
1,4-Dichlorobenzene	18.75	19.22	103	77-120	6	23	
n-Butylbenzene	18.75	22.04 b	118	76-120	7	21	V3
1,2-Dichlorobenzene	18.75	19.10	102	76-120	8	20	
1,2-Dibromo-3-Chloropropane	18.75	18.71	100	65-120	10	22	
1,2,4-Trichlorobenzene	18.75	18.79	100	73-121	4	20	
Hexachlorobutadiene	18.75	22.56 b	120	73-123	1	25	V3
Naphthalene	18.75	20.28	108	62-121	6	32	
1,2,3-Trichlorobenzene	18.75	19.87	106	66-123	4	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514336	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	29.42	118	56-140	
Chloromethane	25.00	29.16	117	46-142	
Vinyl Chloride	25.00	28.95	116	49-136	
Bromomethane	25.00	32.06 b	128	42-154	V3
Chloroethane	25.00	21.65	87	51-133	
Trichlorofluoromethane	25.00	27.41	110	63-135	
Iodomethane	25.00	41.07 b	164 *	70-130	L1 V3
Acetone	25.00	29.16	117	48-130	
1,1-Dichloroethene	25.00	29.31	117	68-133	
Methylene Chloride	25.00	28.00	112	71-120	
Carbon Disulfide	25.00	26.72	107	56-120	
MTBE	25.00	27.01	108	58-120	
trans-1,2-Dichloroethene	25.00	30.53 b	122 *	80-120	L1 V3
Vinyl Acetate	25.00	24.91	100	63-124	
1,1-Dichloroethane	25.00	27.10	108	77-120	
2-Butanone	25.00	27.95	112	57-120	
cis-1,2-Dichloroethene	25.00	28.75	115	75-120	
2,2-Dichloropropane	25.00	28.51	114	72-128	
Chloroform	25.00	26.99	108	78-120	
Bromochloromethane	25.00	30.02	120	78-120	
1,1,1-Trichloroethane	25.00	29.36	117	78-120	
1,1-Dichloropropene	25.00	26.74	107	75-120	
Carbon Tetrachloride	25.00	27.30	109	80-120	
1,2-Dichloroethane	25.00	25.00	100	74-120	
Benzene	25.00	26.86	107	77-120	
Trichloroethene	25.00	29.09	116	78-122	
1,2-Dichloropropane	25.00	25.90	104	76-120	
Bromodichloromethane	25.00	28.36	113	78-120	
Dibromomethane	25.00	27.85	111	77-120	
4-Methyl-2-Pentanone	25.00	24.13	97	65-120	
cis-1,3-Dichloropropene	25.00	29.12	116	76-120	
Toluene	25.00	24.03	96	73-120	
trans-1,3-Dichloropropene	25.00	21.85	87	72-120	
1,1,2-Trichloroethane	25.00	23.67	95	76-120	
2-Hexanone	25.00	22.10	88	57-121	
1,3-Dichloropropane	25.00	23.33	93	75-120	
Tetrachloroethene	25.00	24.97	100	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514336	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	25.31	101	76-120	
1,2-Dibromoethane	25.00	24.66	99	77-120	
Chlorobenzene	25.00	23.94	96	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.61	98	77-120	
Ethylbenzene	25.00	24.57	98	78-120	
m,p-Xylenes	50.00	47.29	95	77-120	
o-Xylene	25.00	23.01	92	77-120	
Styrene	25.00	24.02	96	77-120	
Bromoform	25.00	23.05	92	74-121	
Isopropylbenzene	25.00	23.44	94	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.36	101	73-120	
1,2,3-Trichloropropane	25.00	27.85	111	72-120	
Propylbenzene	25.00	22.42	90	76-120	
Bromobenzene	25.00	28.74	115	75-120	
1,3,5-Trimethylbenzene	25.00	28.44	114	77-120	
2-Chlorotoluene	25.00	26.66	107	76-120	
4-Chlorotoluene	25.00	24.53	98	78-120	
tert-Butylbenzene	25.00	20.39	82	76-120	
1,2,4-Trimethylbenzene	25.00	29.74	119	77-120	
sec-Butylbenzene	25.00	20.49	82	80-120	
para-Isopropyl Toluene	25.00	25.51	102	76-120	
1,3-Dichlorobenzene	25.00	25.07	100	75-120	
1,4-Dichlorobenzene	25.00	23.95	96	77-120	
n-Butylbenzene	25.00	36.35 b	145 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.40	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.01	100	65-120	
1,2,4-Trichlorobenzene	25.00	30.19 b	121	73-121	V3
Hexachlorobutadiene	25.00	23.88	96	73-123	
Naphthalene	25.00	32.85 b	131 *	62-121	L1 V3
1,2,3-Trichlorobenzene	25.00	31.62 b	126 *	66-123	L1 V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	89	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514337	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514337	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	90	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514399

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	31.78	127	56-140	
Chloromethane	<0.2000	25.00	29.29	117	46-142	
Vinyl Chloride	1.810	25.00	30.06	113	49-136	
Bromomethane	<0.2000	25.00	25.11 b	100	42-154	V3
Chloroethane	2.309	25.00	23.74	86	51-133	
Trichlorofluoromethane	<0.2000	25.00	29.81	119	63-135	
Iodomethane	<2.000	25.00	28.99 b	116	60-140	V3
Acetone	<1.000	25.00	27.61	110	48-130	
1,1-Dichloroethene	5.472	25.00	36.43	124	68-133	
Methylene Chloride	0.2151	25.00	29.15	116	71-120	
Carbon Disulfide	<0.1000	25.00	28.20	113	56-120	
MTBE	60.19	25.00	86.99	107	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	33.05 b	132 *	80-120	M1 V3
Vinyl Acetate	<2.000	25.00	21.96	88	63-124	
1,1-Dichloroethane	18.24	25.00	45.63	110	77-120	
2-Butanone	<2.000	25.00	25.41	102	57-120	
cis-1,2-Dichloroethene	1.035	25.00	30.79	119	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.32	109	72-128	
Chloroform	0.1945	25.00	28.89	115	78-120	
Bromochloromethane	<0.1000	25.00	31.92	127 *	78-120	M1
1,1,1-Trichloroethane	4.478	25.00	36.95	130 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	27.58	110	75-120	
Carbon Tetrachloride	<0.1000	25.00	30.23	121 *	80-120	M1
1,2-Dichloroethane	<0.1000	25.00	26.24	105	74-120	
Benzene	48.53	25.00	69.86	85	77-120	
Trichloroethene	3.187	25.00	32.98	119	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.84	103	76-120	
Bromodichloromethane	<0.1000	25.00	29.14	116	78-120	
Dibromomethane	<0.1000	25.00	28.15	113	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	23.62	94	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	28.37	113	76-120	
Toluene	<0.1000	25.00	23.81	95	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	21.03	84	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	23.55	94	76-120	
2-Hexanone	<2.000	25.00	17.56	70	57-121	
1,3-Dichloropropane	<0.1000	25.00	23.26	93	75-120	
Tetrachloroethene	0.1528	25.00	25.34	101	77-120	
Dibromochloromethane	<0.1000	25.00	25.37	101	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.56	98	77-120	
Chlorobenzene	<0.1000	25.00	23.57	94	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.64	99	77-120	
Ethylbenzene	0.2945	25.00	24.86	98	78-120	
m,p-Xylenes	<0.1594	50.00	49.13	98	77-120	
o-Xylene	0.4831	25.00	24.38	96	77-120	
Styrene	<0.1000	25.00	24.58	98	77-120	
Bromoform	<0.2000	25.00	23.55	91	74-121	
Isopropylbenzene	10.22	25.00	33.28	92	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	23.83	95	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.61	106	72-120	
Propylbenzene	6.772	25.00	29.50	91	76-120	
Bromobenzene	<0.1000	25.00	27.14	109	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.13	105	77-120	
2-Chlorotoluene	<0.1000	25.00	25.92	104	76-120	
4-Chlorotoluene	<0.1000	25.00	24.23	97	78-120	
tert-Butylbenzene	0.4269	25.00	21.46	84	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.86	107	77-120	
sec-Butylbenzene	3.049	25.00	22.93	80	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.41	94	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.36	97	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	23.26	93	77-120	
n-Butylbenzene	4.694	25.00	39.97 b	141 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	24.70	99	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.21	94	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	26.84 b	107	73-121	V3
Hexachlorobutadiene	<0.4000	25.00	23.51	94	73-123	
Naphthalene	17.64	25.00	43.89 b	105	62-121	V3
1,2,3-Trichlorobenzene	<0.1149	25.00	28.56 b	114	66-123	V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	109	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC514400

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	28.18	113	56-140	12	24	
Chloromethane	25.00	28.34	113	46-142	3	24	
Vinyl Chloride	25.00	28.58	107	49-136	5	24	
Bromomethane	25.00	26.90 b	108	42-154	7	24	V3
Chloroethane	25.00	22.49	81	51-133	5	25	
Trichlorofluoromethane	25.00	26.74	107	63-135	11	20	
Iodomethane	25.00	32.94 b	132	60-140	13	30	V3
Acetone	25.00	24.46	98	48-130	12	41	
1,1-Dichloroethene	25.00	33.78	113	68-133	8	20	
Methylene Chloride	25.00	27.20	108	71-120	7	20	
Carbon Disulfide	25.00	26.02	104	56-120	8	20	
MTBE	25.00	83.06	91	58-120	5	21	
trans-1,2-Dichloroethene	25.00	29.96 b	120	80-120	10	24	V3
Vinyl Acetate	25.00	20.41	82	63-124	7	24	
1,1-Dichloroethane	25.00	41.99	95	77-120	8	20	
2-Butanone	25.00	24.15	97	57-120	5	32	
cis-1,2-Dichloroethene	25.00	29.01	112	75-120	6	20	
2,2-Dichloropropane	25.00	24.65	99	72-128	10	24	
Chloroform	25.00	26.48	105	78-120	9	20	
Bromochloromethane	25.00	30.48	121 *	78-120	5	20	M1
1,1,1-Trichloroethane	25.00	33.40	116	78-120	10	20	
1,1-Dichloropropene	25.00	26.03	104	75-120	6	21	
Carbon Tetrachloride	25.00	27.80	111	80-120	8	21	
1,2-Dichloroethane	25.00	24.17	97	74-120	8	20	
Benzene	25.00	67.27	75 *	77-120	4	20	M2
Trichloroethene	25.00	31.24	112	78-122	5	20	
1,2-Dichloropropane	25.00	24.84	99	76-120	4	20	
Bromodichloromethane	25.00	27.71	110	78-120	5	20	
Dibromomethane	25.00	27.05	108	77-120	4	20	
4-Methyl-2-Pentanone	25.00	22.91	92	65-120	3	22	
cis-1,3-Dichloropropene	25.00	27.42	110	76-120	3	20	
Toluene	25.00	22.49	90	73-120	6	20	
trans-1,3-Dichloropropene	25.00	20.04	80	72-120	5	20	
1,1,2-Trichloroethane	25.00	22.20	89	76-120	6	20	
2-Hexanone	25.00	17.52	70	57-121	0	25	
1,3-Dichloropropane	25.00	21.92	88	75-120	6	20	
Tetrachloroethene	25.00	24.12	96	77-120	5	20	
Dibromochloromethane	25.00	24.08	96	76-120	5	20	
1,2-Dibromoethane	25.00	23.65	95	77-120	4	20	
Chlorobenzene	25.00	22.56	90	78-120	4	20	
1,1,1,2-Tetrachloroethane	25.00	23.08	92	77-120	7	20	
Ethylbenzene	25.00	23.75	94	78-120	5	26	
m,p-Xylenes	50.00	47.35	95	77-120	4	20	
o-Xylene	25.00	23.72	93	77-120	3	20	
Styrene	25.00	23.96	96	77-120	3	20	
Bromoform	25.00	22.67	88	74-121	4	21	
Isopropylbenzene	25.00	30.34	80	71-120	9	20	
1,1,2,2-Tetrachloroethane	25.00	21.46	85	73-120	10	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215063	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	23.13	93	72-120	14	20	
Propylbenzene	25.00	28.07	85	76-120	5	20	
Bromobenzene	25.00	25.41	102	75-120	7	20	
1,3,5-Trimethylbenzene	25.00	24.47	98	77-120	7	20	
2-Chlorotoluene	25.00	23.65	95	76-120	9	20	
4-Chlorotoluene	25.00	22.57	90	78-120	7	20	
tert-Butylbenzene	25.00	20.89	82	76-120	3	21	
1,2,4-Trimethylbenzene	25.00	24.73	99	77-120	8	20	
sec-Butylbenzene	25.00	22.63	78 *	80-120	1	21	M2
para-Isopropyl Toluene	25.00	22.75	91	76-120	3	20	
1,3-Dichlorobenzene	25.00	23.04	92	75-120	6	20	
1,4-Dichlorobenzene	25.00	22.12	88	77-120	5	23	
n-Butylbenzene	25.00	36.56 b	127 *	76-120	9	21	M1 V3
1,2-Dichlorobenzene	25.00	23.51	94	76-120	5	20	
1,2-Dibromo-3-Chloropropane	25.00	21.78	85	65-120	11	22	
1,2,4-Trichlorobenzene	25.00	25.02 b	100	73-121	7	20	V3
Hexachlorobutadiene	25.00	23.00	92	73-123	2	25	
Naphthalene	25.00	40.57 b	92	62-121	8	32	V3
1,2,3-Trichlorobenzene	25.00	26.47 b	106	66-123	8	29	V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	103	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499361940008 File : ji808 Time : 09-SEP-2009 00:19

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	42221	27.77	
75	30% - 60% of mass 95	74037	48.70	
95		152042	100.00	
96	5% - 9% of mass 95	10062	6.62	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	113397	74.58	
175	5% - 9% of mass 174	8359	7.37	
176	> 95% and < 101% of mass 174	108642	95.81	
177	5% - 9% of mass 176	7287	6.71	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499363592006 File : ji906 Time : 09-SEP-2009 14:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37064	27.53	
75	30% - 60% of mass 95	66016	49.03	
95		134640	100.00	
96	5% - 9% of mass 95	8828	6.56	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	99874	74.18	
175	5% - 9% of mass 174	7262	7.27	
176	> 95% and < 101% of mass 174	94946	95.07	
177	5% - 9% of mass 176	6387	6.73	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499392292002 File : jit02 Time : 29-SEP-2009 11:11

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	84730	29.38	
75	30% - 60% of mass 95	148800	51.59	
95		288426	100.00	
96	5% - 9% of mass 95	19269	6.68	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	214912	74.51	
175	5% - 9% of mass 174	16023	7.46	
176	> 95% and < 101% of mass 174	208341	96.94	
177	5% - 9% of mass 176	14218	6.82	

Analyst: DNT Date: 09/29/09 Reviewer: LW Date: 09/29/09

CURTIS & TOMPKINS BFB TUNE FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839393591010 File : kiu10 Time : 30-SEP-2009 11:44

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10882	16.10	
75	30% - 60% of mass 95	32085	47.47	
95		67583	100.00	
96	5% - 9% of mass 95	4777	7.07	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	56512	83.62	
175	5% - 9% of mass 174	4229	7.48	
176	> 95% and < 101% of mass 174	54238	95.98	
177	5% - 9% of mass 176	3468	6.39	

BO: 09/30/09 DNT: 10/01/09 LW: 10/01/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215063 MSVOA Water: EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Date : 09-SEP-2009 02:42 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ji812	499361940012	.25/0.5PPB	09-SEP-2009 02:42	S12733 (2000000X), S12773 (2000000X), S12217 (2000000X), S12685 (1000000X), S12692 (2500X)
L2	ji813	499361940013	0.5/1PPB	09-SEP-2009 03:16	S12733 (1000000X), S12773 (1000000X), S12217 (1000000X), S12685 (500000X), S12692 (2500X)
L3	ji814	499361940014	2PPB	09-SEP-2009 03:51	S12733 (250000X), S12773 (250000X), S12217 (500000X), S12685 (250000X), S12692 (2500X)
L4	ji815	499361940015	5PPB	09-SEP-2009 04:25	S12733 (100000X), S12773 (100000X), S12217 (200000X), S12685 (100000X), S12692 (2500X)
L5	ji816	499361940016	10PPB	09-SEP-2009 04:59	S12733 (50000X), S12773 (50000X), S12217 (100000X), S12685 (50000X), S12692 (2500X)
L6	ji817	499361940017	20PPB	09-SEP-2009 05:34	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12685 (25000X), S12692 (2500X)
L7	ji818	499361940018	50PPB	09-SEP-2009 06:08	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12685 (10000X), S12692 (2500X)
L8	ji819	499361940019	75PPB	09-SEP-2009 06:42	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12685 (6667X), S12692 (2500X)
L9	ji820	499361940020	100PPB	09-SEP-2009 07:17	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12685 (5000X), S12692 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.6454	0.6785	0.6243	0.6055	0.7615	0.7349	0.6564	0.6711	AVRG		1.48764		0.6722	8	15	0.05	0.99	
Chloromethane		1.5093	1.4219	1.2231	1.2011	1.4382	1.3492	1.2959	1.3263	AVRG		0.74314		1.3456	8	15	0.10	0.99	
Vinyl Chloride	0.8871	0.9513	1.0019	0.9129	0.8872	1.1307	1.0595	0.9789	0.9942	AVRG		1.02231		0.9782	8	15	0.05	0.99	
Bromomethane		0.4981m	0.5747	0.4665	0.4524	0.5383	0.5160	0.4937	0.5160	AVRG		1.97254		0.5070	8	15	0.05	0.99	
Chloroethane		0.7052	0.6161	0.5678	0.4631	0.5966	0.5465	0.5283	0.5237	AVRG		1.75927		0.5684	13	15	0.05	0.99	
Trichlorofluoromethane		0.6799	0.7087	0.6587	0.6243	0.8054	0.7530	0.6843	0.6989	AVRG		1.42521		0.7017	8	15	0.05	0.99	
Acetone				0.3953	0.3583	0.2918	0.2818	0.2980	0.3206	AVRG		3.08358		0.3243	14	15	0.05	0.99	
1,1-Dichloroethene		0.3480	0.5008	0.4908	0.4341	0.5199	0.5101	0.4913	0.5048	AVRG		2.10536		0.4750	12	15	0.05	0.99	
Iodomethane			0.2633	0.3064	0.3898	0.5675	0.6161	0.6070	0.6432	QUAD	2.11604	1.65576	-0.00197	0.4848	0.999	15	0.05	0.99	
Methylene Chloride		0.7746	0.7235	0.7242	0.7005	0.7386	0.7000	0.6875	0.7221	AVRG		1.38623		0.7214	4	15	0.05	0.99	
Carbon Disulfide		1.8372	2.2159	2.1329	1.9816	2.3654	2.2686	2.1810	2.2537	AVRG		0.46414		2.1545	8	15	0.05	0.99	
MTBE		1.8427	1.7628	1.6487	1.6803	1.9370	1.8518	1.8190	1.8911	AVRG		0.55427		1.8042	6	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5034	0.6153	0.5270	0.5171	0.5979	0.5853	0.5588	0.5809	AVRG		1.78346		0.5607	7	15	0.05	0.99	
Vinyl Acetate					1.2081	2.0056	2.0275	1.0372	1.1031	AVRG		0.67737		1.4763	**34**	15	0.05	0.99	rsd
1,1-Dichloroethane		1.2585	1.3704	1.2751	1.2341	1.4267	1.3592	1.3247	1.3931	AVRG		0.75174		1.3302	5	15	0.10	0.99	
2-Butanone			0.5118	0.4767	0.4601	0.4448	0.4177	0.4074	0.4395	AVRG		2.21653		0.4512	8	15	0.05	0.99	
2,2-Dichloropropane		0.5896	0.6552	0.6206	0.5776	0.6710	0.6525	0.6117	0.6179	AVRG		1.60125		0.6245	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6149	0.6824	0.6297	0.6000	0.6898	0.6643	0.6468	0.6782	AVRG		1.53665		0.6508	5	15	0.05	0.99	
Chloroform		1.3337	1.1517	1.0418	0.9891	1.1244	1.0792	1.0424	1.0773	AVRG		0.90501		1.1050	10	15	0.05	0.99	
Bromochloromethane		0.2603	0.2901	0.2729	0.2739	0.3214	0.3138	0.3131	0.3272	AVRG		3.37184		0.2966	9	15	0.05	0.99	
1,1,1-Trichloroethane		0.5468	0.6897	0.6722	0.6381	0.7167	0.7218	0.6866	0.6753	AVRG		1.49613		0.6684	8	15	0.05	0.99	
1,1-Dichloropropene		0.4024	0.5019	0.4981	0.4596	0.5005	0.5064	0.4859	0.4620	AVRG		2.09601		0.4771	7	15	0.05	0.99	
Carbon Tetrachloride		0.2220	0.3158	0.3361	0.3060	0.3254	0.3423	0.3289	0.2976	AVRG		3.23351		0.3093	12	15	0.05	0.99	
1,2-Dichloroethane		0.5312	0.5433	0.5139	0.5129	0.5686	0.5494	0.5388	0.5407	AVRG		1.86102		0.5373	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.4940	1.5343	1.4619	1.3935	1.5659	1.4939	1.4331	1.4346	AVRG		0.67733		1.4764	4	15	0.05	0.99	
Trichloroethene		0.3135	0.3737	0.3691	0.3398	0.3618	0.3472	0.3736	0.3715	AVRG		2.80687		0.3563	6	15	0.05	0.99	
1,2-Dichloropropane		0.4959	0.5074	0.4688	0.4571	0.5081	0.4901	0.4861	0.4900	AVRG		2.04943		0.4879	4	15	0.05	0.99	
Bromodichloromethane		0.4761	0.5057	0.4681	0.4607	0.5259	0.5008	0.4944	0.5056	AVRG		2.03182		0.4922	4	15	0.05	0.99	
Dibromomethane		0.2213	0.2515	0.2235	0.2288	0.2652	0.2537	0.2501	0.2558	AVRG		4.10292		0.2437	7	15	0.05	0.99	
4-Methyl-2-Pentanone			0.5531	0.4822	0.4919	0.5910	0.5673	0.5606	0.5788	AVRG		1.83014		0.5464	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.6024	0.6368	0.5960	0.5872	0.6698	0.6323	0.6265	0.6374	AVRG		1.60370		0.6236	4	15	0.05	0.99	
Toluene		0.9856	1.0398	1.1786	1.1103	1.0205	1.0238	0.9738	0.9466	AVRG		0.96630		1.0349	7	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6631	0.6595	0.6418	0.6652	0.7426	0.7315	0.6991	0.7252	AVRG		1.44717		0.6910	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.2148	0.2207	0.2072	0.2073	0.2378	0.2333	0.2264	0.2322	AVRG		4.49555		0.2224	5	15	0.05	0.99	
2-Hexanone			0.5124	0.4799	0.4626	0.4969	0.4837	0.4727	0.4923	AVRG		2.05860		0.4858	3	15	0.05	0.99	
1,3-Dichloropropane		0.6815	0.7001	0.6488	0.6654	0.7489	0.7366	0.7191	0.7403	AVRG		1.41827		0.7051	5	15	0.05	0.99	
Tetrachloroethene		0.2828	0.3738	0.3636	0.3348	0.3459	0.3747	0.3611	0.3305	AVRG		2.89101		0.3459	9	15	0.05	0.99	
Dibromochloromethane		0.3539	0.3932	0.3659	0.3657	0.4283	0.4223	0.4121	0.4221	AVRG		2.52887		0.3954	8	15	0.05	0.99	
1,2-Dibromoethane		0.3220	0.3808	0.3609	0.3683	0.4241	0.4197	0.4033	0.4164	AVRG		2.58446		0.3869	9	15	0.05	0.99	
Chlorobenzene		1.0262	1.0857	0.9794	0.9673	1.0854	1.0727	1.0391	1.0212	AVRG		0.96653		1.0346	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3105	0.3559	0.3269	0.3232	0.3626	0.3676	0.3618	0.3585	AVRG		2.89133		0.3459	6	15	0.05	0.99	
Ethylbenzene		1.8521	2.0005	1.9213	1.8343	1.8776	1.9187	1.8107	1.6925	AVRG		0.53663		1.8635	5	15	0.05	0.99	
m,p-Xylenes	0.6689	0.6306	0.6920	0.6939	0.6668	0.6568	0.6752	0.6381	0.5904	AVRG		1.52215		0.6570	5	15	0.05	0.99	
o-Xylene		0.6433	0.6674	0.6713	0.6431	0.6613	0.6763	0.6410	0.6061	AVRG		1.53558		0.6512	4	15	0.05	0.99	
Styrene		1.1338	1.2490	1.1403	1.1414	1.2543	1.2449	1.1801	1.1663	AVRG		0.84121		1.1888	4	15	0.05	0.99	
Bromoform		0.2349	0.2643	0.2432	0.2578	0.2956	0.2949	0.2876	0.2929	AVRG		3.68474		0.2714	9	15	0.10	0.99	
Isopropylbenzene		3.1907	3.5284	3.3646	3.1636	3.2479	3.4516	3.2783	2.9069	AVRG		0.30614		3.2665	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.9599	0.9087	0.8036	0.8776	1.0791	1.0511	0.9155	0.9342	AVRG		1.06246		0.9412	10	15	0.30	0.99	
1,2,3-Trichloropropane		0.9685	0.9189	0.8487	0.8603	0.9818	0.9356	0.8992	0.8954	AVRG		1.09462		0.9136	5	15	0.05	0.99	
Propylbenzene		4.3101	4.6513	4.4056	4.1873	4.2283	4.4594	4.1717	3.7040	AVRG		0.23448		4.2647	7	15	0.05	0.99	
Bromobenzene		0.8081	0.8911	0.8564	0.8262	0.9559	0.9472	0.9017	0.8894	AVRG		1.13059		0.8845	6	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.7587	2.8838	2.7952	2.6280	2.7326	2.7825	2.6606	2.3692	AVRG		0.37019		2.7013	6	15	0.05	0.99	
2-Chlorotoluene		3.0925	3.1957	2.8991	2.7035	2.9645	2.9342	2.7835	2.5525	AVRG		0.34594		2.8907	7	15	0.05	0.99	
4-Chlorotoluene		2.9945	3.0070	2.6480	2.5894	2.7740	2.7643	2.6642	2.5013	AVRG		0.36459		2.7428	7	15	0.05	0.99	
tert-Butylbenzene		2.0959	2.2586	2.1555	2.0563	2.1153	2.2614	2.1637	1.8725	AVRG		0.47116		2.1224	6	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.8859	2.9236	2.9257	2.7624	2.8005	2.8327	2.6903	2.5030	AVRG		0.35836		2.7905	5	15	0.05	0.99	
sec-Butylbenzene		3.0771	3.5544	3.5133	3.2045	3.2342	3.5171	3.3395	2.9237	AVRG		0.30345		3.2955	7	15	0.05	0.99	
para-Isopropyl Toluene		2.5921	2.7653	2.6481	2.4663	2.5556	2.6975	2.5998	2.3142	AVRG		0.38762		2.5799	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.5381	1.6866	1.5352	1.4636	1.6278	1.6055	1.5759	1.5079	AVRG		0.63792		1.5676	5	15	0.05	0.99	
1,4-Dichlorobenzene		1.6780	1.7525	1.5542	1.5378	1.7267	1.6936	1.6183	1.5769	AVRG		0.60892		1.6423	5	15	0.05	0.99	
n-Butylbenzene		2.6320	2.7602	2.6553	2.4553	2.5151	2.6873	2.5971	2.2981	AVRG		0.38834		2.5751	6	15	0.05	0.99	
1,2-Dichlorobenzene		1.5331	1.5187	1.4267	1.4008	1.5876	1.5551	1.5086	1.4678	AVRG		0.66676		1.4998	4	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1652	0.1336	0.1517	0.1713	0.1697	0.1623	0.1661	AVRG		6.25058		0.1600	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.0034	0.8829	0.8119	0.8084	0.9164	0.9035	0.8982	0.8686	AVRG		1.12783		0.8867	7	15	0.05	0.99	
Hexachlorobutadiene			0.2878	0.2905	0.2638	0.2719	0.3130	0.3101	0.2634	AVRG		3.49917		0.2858	7	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.8799	1.8182	1.7200	1.7448	2.0430	2.0081	1.9450	1.9629	AVRG		0.52904		1.8902	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7229	0.7418	0.6910	0.6958	0.8029	0.7992	0.7930	0.7811	AVRG		1.32723		0.7534	6	15	0.05	0.99	
Dibromofluoromethane	0.5749	0.5652	0.5619	0.5609	0.5627	0.5613	0.5695	0.5654	0.5860	AVRG		1.76204		0.5675	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.4074	0.4080	0.4067	0.3908	0.4007	0.3964	0.3859	0.3847	0.3725	AVRG		2.53295		0.3948	3	15	0.05	0.99	
Toluene-d8	1.4162	1.4046	1.4140	1.4055	1.4132	1.4016	1.4212	1.4115	1.4191	AVRG		0.70827		1.4119	0	15	0.05	0.99	
Bromofluorobenzene	1.0908	1.1017	1.0830	1.0935	1.0812	1.0846	1.0831	1.0776	1.0653	AVRG		0.92205		1.0845	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-4	2.000	1	5.000	-7	10.00	-10	20.00	13	50.00	9	75.00	-2	100.0	0
Chloromethane			1.000	12	2.000	6	5.000	-9	10.00	-11	20.00	7	50.00	0	75.00	-4	100.0	-1
Vinyl Chloride	0.500	-9	1.000	-3	2.000	2	5.000	-7	10.00	-9	20.00	16	50.00	8	75.00	0	100.0	2
Bromomethane			1.000	-2	2.000	13	5.000	-8	10.00	-11	20.00	6	50.00	2	75.00	-3	100.0	2
Chloroethane			1.000	24	2.000	8	5.000	0	10.00	-19	20.00	5	50.00	-4	75.00	-7	100.0	-8
Trichlorofluoromethane			1.000	-3	2.000	1	5.000	-6	10.00	-11	20.00	15	50.00	7	75.00	-2	100.0	0
Acetone							5.000	22	10.00	10	20.00	-10	50.00	-13	75.00	-8	100.0	-1
1,1-Dichloroethene			0.500	-27	2.000	5	5.000	3	10.00	-9	20.00	9	50.00	7	75.00	3	100.0	6
Iodomethane					2.000	49	5.000	-7	10.00	-15	20.00	3	50.00	3	75.00	-2	100.0	0
Methylene Chloride			0.500	7	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	-3	75.00	-5	100.0	0
Carbon Disulfide			0.500	-15	2.000	3	5.000	-1	10.00	-8	20.00	10	50.00	5	75.00	1	100.0	5
MTBE			0.500	2	2.000	-2	5.000	-9	10.00	-7	20.00	7	50.00	3	75.00	1	100.0	5
trans-1,2-Dichloroethene			0.500	-10	2.000	10	5.000	-6	10.00	-8	20.00	7	50.00	4	75.00	0	100.0	4
Vinyl Acetate									10.00	-18	20.00	36	50.00	37	75.00	-30	100.0	-25
1,1-Dichloroethane			0.500	-5	2.000	3	5.000	-4	10.00	-7	20.00	7	50.00	2	75.00	0	100.0	5
2-Butanone					2.000	13	5.000	6	10.00	2	20.00	-1	50.00	-7	75.00	-10	100.0	-3
2,2-Dichloropropane			0.500	-6	2.000	5	5.000	-1	10.00	-8	20.00	7	50.00	4	75.00	-2	100.0	-1
cis-1,2-Dichloroethene			0.500	-6	2.000	5	5.000	-3	10.00	-8	20.00	6	50.00	2	75.00	-1	100.0	4
Chloroform			0.500	21	2.000	4	5.000	-6	10.00	-10	20.00	2	50.00	-2	75.00	-6	100.0	-3
Bromochloromethane			0.500	-12	2.000	-2	5.000	-8	10.00	-8	20.00	8	50.00	6	75.00	6	100.0	10
1,1,1-Trichloroethane			0.500	-18	2.000	3	5.000	1	10.00	-5	20.00	7	50.00	8	75.00	3	100.0	1
1,1-Dichloropropene			0.500	-16	2.000	5	5.000	4	10.00	-4	20.00	5	50.00	6	75.00	2	100.0	-3
Carbon Tetrachloride			0.500	-28	2.000	2	5.000	9	10.00	-1	20.00	5	50.00	11	75.00	6	100.0	-4
1,2-Dichloroethane			0.500	-1	2.000	1	5.000	-4	10.00	-5	20.00	6	50.00	2	75.00	0	100.0	1
Benzene			0.500	1	2.000	4	5.000	-1	10.00	-6	20.00	6	50.00	1	75.00	-3	100.0	-3
Trichloroethene			0.500	-12	2.000	5	5.000	4	10.00	-5	20.00	2	50.00	-3	75.00	5	100.0	4
1,2-Dichloropropane			0.500	2	2.000	4	5.000	-4	10.00	-6	20.00	4	50.00	0	75.00	0	100.0	0
Bromodichloromethane			0.500	-3	2.000	3	5.000	-5	10.00	-6	20.00	7	50.00	2	75.00	0	100.0	3
Dibromomethane			0.500	-9	2.000	3	5.000	-8	10.00	-6	20.00	9	50.00	4	75.00	3	100.0	5
4-Methyl-2-Pentanone					2.000	1	5.000	-12	10.00	-10	20.00	8	50.00	4	75.00	3	100.0	6
cis-1,3-Dichloropropene			0.500	-3	2.000	2	5.000	-4	10.00	-6	20.00	7	50.00	1	75.00	0	100.0	2
Toluene			0.500	-5	2.000	0	5.000	14	10.00	7	20.00	-1	50.00	-1	75.00	-6	100.0	-9
trans-1,3-Dichloropropene			0.500	-4	2.000	-5	5.000	-7	10.00	-4	20.00	7	50.00	6	75.00	1	100.0	5
1,1,2-Trichloroethane			0.500	-3	2.000	-1	5.000	-7	10.00	-7	20.00	7	50.00	5	75.00	2	100.0	4
2-Hexanone					2.000	5	5.000	-1	10.00	-5	20.00	2	50.00	0	75.00	-3	100.0	1
1,3-Dichloropropane			0.500	-3	2.000	-1	5.000	-8	10.00	-6	20.00	6	50.00	4	75.00	2	100.0	5
Tetrachloroethene			0.500	-18	2.000	8	5.000	5	10.00	-3	20.00	0	50.00	8	75.00	4	100.0	-4
Dibromochloromethane			0.500	-10	2.000	-1	5.000	-7	10.00	-8	20.00	8	50.00	7	75.00	4	100.0	7
1,2-Dibromoethane			0.500	-17	2.000	-2	5.000	-7	10.00	-5	20.00	10	50.00	8	75.00	4	100.0	8
Chlorobenzene			0.500	-1	2.000	5	5.000	-5	10.00	-7	20.00	5	50.00	4	75.00	0	100.0	-1
1,1,1,2-Tetrachloroethane			0.500	-10	2.000	3	5.000	-5	10.00	-7	20.00	5	50.00	6	75.00	5	100.0	4
Ethylbenzene			0.500	-1	2.000	7	5.000	3	10.00	-2	20.00	1	50.00	3	75.00	-3	100.0	-9

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	2	1.000	-4	4.000	5	10.00	6	20.00	1	40.00	0	100.0	3	150.0	-3	200.0	-10
o-Xylene			0.500	-1	2.000	2	5.000	3	10.00	-1	20.00	2	50.00	4	75.00	-2	100.0	-7
Styrene			0.500	-5	2.000	5	5.000	-4	10.00	-4	20.00	6	50.00	5	75.00	-1	100.0	-2
Bromoform			0.500	-13	2.000	-3	5.000	-10	10.00	-5	20.00	9	50.00	9	75.00	6	100.0	8
Isopropylbenzene			0.500	-2	2.000	8	5.000	3	10.00	-3	20.00	-1	50.00	6	75.00	0	100.0	-11
1,1,2,2-Tetrachloroethane			0.500	2	2.000	-3	5.000	-15	10.00	-7	20.00	15	50.00	12	75.00	-3	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	1	5.000	-7	10.00	-6	20.00	7	50.00	2	75.00	-2	100.0	-2
Propylbenzene			0.500	1	2.000	9	5.000	3	10.00	-2	20.00	-1	50.00	5	75.00	-2	100.0	-13
Bromobenzene			0.500	-9	2.000	1	5.000	-3	10.00	-7	20.00	8	50.00	7	75.00	2	100.0	1
1,3,5-Trimethylbenzene			0.500	2	2.000	7	5.000	3	10.00	-3	20.00	1	50.00	3	75.00	-2	100.0	-12
2-Chlorotoluene			0.500	7	2.000	11	5.000	0	10.00	-6	20.00	3	50.00	2	75.00	-4	100.0	-12
4-Chlorotoluene			0.500	9	2.000	10	5.000	-3	10.00	-6	20.00	1	50.00	1	75.00	-3	100.0	-9
tert-Butylbenzene			0.500	-1	2.000	6	5.000	2	10.00	-3	20.00	0	50.00	7	75.00	2	100.0	-12
1,2,4-Trimethylbenzene			0.500	3	2.000	5	5.000	5	10.00	-1	20.00	0	50.00	2	75.00	-4	100.0	-10
sec-Butylbenzene			0.500	-7	2.000	8	5.000	7	10.00	-3	20.00	-2	50.00	7	75.00	1	100.0	-11
para-Isopropyl Toluene			0.500	0	2.000	7	5.000	3	10.00	-4	20.00	-1	50.00	5	75.00	1	100.0	-10
1,3-Dichlorobenzene			0.500	-2	2.000	8	5.000	-2	10.00	-7	20.00	4	50.00	2	75.00	1	100.0	-4
1,4-Dichlorobenzene			0.500	2	2.000	7	5.000	-5	10.00	-6	20.00	5	50.00	3	75.00	-1	100.0	-4
n-Butylbenzene			0.500	2	2.000	7	5.000	3	10.00	-5	20.00	-2	50.00	4	75.00	1	100.0	-11
1,2-Dichlorobenzene			0.500	2	2.000	1	5.000	-5	10.00	-7	20.00	6	50.00	4	75.00	1	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	3	5.000	-16	10.00	-5	20.00	7	50.00	6	75.00	1	100.0	4
1,2,4-Trichlorobenzene			0.500	13	2.000	0	5.000	-8	10.00	-9	20.00	3	50.00	2	75.00	1	100.0	-2
Hexachlorobutadiene					2.000	1	5.000	2	10.00	-8	20.00	-5	50.00	10	75.00	9	100.0	-8
Naphthalene			0.500	-1	2.000	-4	5.000	-9	10.00	-8	20.00	8	50.00	6	75.00	3	100.0	4
1,2,3-Trichlorobenzene			0.500	-4	2.000	-2	5.000	-8	10.00	-8	20.00	7	50.00	6	75.00	5	100.0	4
Dibromofluoromethane	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	3
1,2-Dichloroethane-d4	50.00	3	50.00	3	50.00	3	50.00	-1	50.00	1	50.00	0	50.00	-2	50.00	-3	50.00	-6
Toluene-d8	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	1	50.00	0	50.00	1
Bromofluorobenzene	50.00	1	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	-2

BO 09/09/09 : All manual integrations made due to spliting of peaks, fronting/tailing of peaks.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Cal Date : 09-SEP-2009 Type : WATER

ICV 499363592008 (ji908 09-SEP-2009) stds: S12922 (10000X), S12589 (10000X), S12693 (10000X), S12845 (10000X), S12692 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	29.32	ug/L	17	25	
Chloromethane	25.00	24.90	ug/L	0	25	
Vinyl Chloride	25.00	26.28	ug/L	5	25	
Bromomethane	25.00	31.48	ug/L	**26**	25	v+
Chloroethane	25.00	27.31	ug/L	9	25	
Trichlorofluoromethane	25.00	28.98	ug/L	16	25	
Acetone	25.00	18.24	ug/L	-27	25	v-
1,1-Dichloroethene	25.00	28.82	ug/L	15	25	
Iodomethane	25.00	31.45	ug/L	**26**	25	v+
Methylene Chloride	25.00	26.17	ug/L	5	25	
Carbon Disulfide	25.00	26.03	ug/L	4	25	
MTBE	25.00	24.63	ug/L	-1	25	
trans-1,2-Dichloroethene	25.00	28.76	ug/L	15	25	
Vinyl Acetate	25.00	38.34	ug/L	**53**	25	v+
1,1-Dichloroethane	25.00	26.61	ug/L	6	25	
2-Butanone	25.00	22.86	ug/L	-9	25	
2,2-Dichloropropane	25.00	36.55	ug/L	**46**	25	v+
cis-1,2-Dichloroethene	25.00	26.30	ug/L	5	25	
Chloroform	25.00	26.11	ug/L	4	25	
Bromochloromethane	25.00	27.34	ug/L	9	25	
1,1,1-Trichloroethane	25.00	28.43	ug/L	14	25	
1,1-Dichloropropene	25.00	29.41	ug/L	18	25	
Carbon Tetrachloride	25.00	30.22	ug/L	**21**	25	
1,2-Dichloroethane	25.00	27.43	ug/L	10	25	
Benzene	25.00	27.27	ug/L	9	25	
Trichloroethene	25.00	26.38	ug/L	6	25	
1,2-Dichloropropane	25.00	26.11	ug/L	4	25	
Bromodichloromethane	25.00	27.62	ug/L	10	25	
Dibromomethane	25.00	27.33	ug/L	9	25	
4-Methyl-2-Pentanone	25.00	26.31	ug/L	5	25	
cis-1,3-Dichloropropene	25.00	29.76	ug/L	19	25	
Toluene	25.00	26.06	ug/L	4	25	
trans-1,3-Dichloropropene	25.00	26.81	ug/L	7	25	
1,1,2-Trichloroethane	25.00	27.24	ug/L	9	25	
2-Hexanone	25.00	24.55	ug/L	-2	25	
1,3-Dichloropropane	25.00	27.44	ug/L	10	25	
Tetrachloroethene	25.00	29.54	ug/L	18	25	
Dibromochloromethane	25.00	27.93	ug/L	12	25	
1,2-Dibromoethane	25.00	27.99	ug/L	12	25	
Chlorobenzene	25.00	27.18	ug/L	9	25	
1,1,1,2-Tetrachloroethane	25.00	28.01	ug/L	12	25	
Ethylbenzene	25.00	27.83	ug/L	11	25	
m,p-Xylenes	50.00	55.10	ug/L	10	25	
o-Xylene	25.00	27.21	ug/L	9	25	
Styrene	25.00	27.51	ug/L	10	25	
Bromoform	25.00	27.68	ug/L	11	25	
Isopropylbenzene	25.00	25.46	ug/L	2	25	
1,1,2,2-Tetrachloroethane	25.00	29.72	ug/L	19	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	27.54	ug/L	10	25	
Propylbenzene	25.00	28.98	ug/L	16	25	
Bromobenzene	25.00	27.73	ug/L	11	25	
1,3,5-Trimethylbenzene	25.00	28.85	ug/L	15	25	
2-Chlorotoluene	25.00	28.27	ug/L	13	25	
4-Chlorotoluene	25.00	27.28	ug/L	9	25	
tert-Butylbenzene	25.00	29.55	ug/L	18	25	
1,2,4-Trimethylbenzene	25.00	28.01	ug/L	12	25	
sec-Butylbenzene	25.00	30.70	ug/L	**23**	25	
para-Isopropyl Toluene	25.00	29.18	ug/L	17	25	
1,3-Dichlorobenzene	25.00	27.77	ug/L	11	25	
1,4-Dichlorobenzene	25.00	27.38	ug/L	10	25	
n-Butylbenzene	25.00	31.80	ug/L	**27**	25	v+
1,2-Dichlorobenzene	25.00	27.52	ug/L	10	25	
1,2-Dibromo-3-Chloropropane	25.00	28.72	ug/L	15	25	
1,2,4-Trichlorobenzene	25.00	27.62	ug/L	10	25	
Hexachlorobutadiene	25.00	32.03	ug/L	**28**	25	v+
Naphthalene	25.00	28.17	ug/L	13	25	
1,2,3-Trichlorobenzene	25.00	29.05	ug/L	16	25	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215063 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC514129 IDF : 1.0
Seqnum : 499392292003.7 File : jit03 Time : 29-SEP-2009 11:51
Cal : 499361940002 Caldate : 09-SEP-2009 Caltype : WATER
Standards: S12922 (13330X), S12996 (13330X), S12693 (13330X), S13008 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6722	0.9285	18.75	25.90	ug/L	**38**	20	0.0500	c+ u ***
Chloromethane	1.3456	1.2261	18.75	17.08	ug/L	-9	20	0.1000	u
Vinyl Chloride	0.9782	1.0073	18.75	19.31	ug/L	3	20	0.0500	u
Bromomethane	0.5070	0.3157	18.75	11.68	ug/L	**-38**	20	0.0500	c- u v+ ***
Chloroethane	0.5684	0.5916	18.75	19.51	ug/L	4	20	0.0500	u
Trichlorofluoromethane	0.7017	0.8564	18.75	22.89	ug/L	**22**	20	0.0500	c+ u ***
Iodomethane	0.4848	0.4320	18.75	15.40	ug/L	-18	20	0.0500	u v+ ***
Acetone	0.3243	0.3389	18.75	19.59	ug/L	4	20	0.0500	u v- ***
1,1-Dichloroethene	0.4750	0.5317	18.75	20.99	ug/L	12	20	0.0500	u
Methylene Chloride	0.7214	0.7559	18.75	19.65	ug/L	5	20	0.0500	u
Carbon Disulfide	2.1545	2.1335	18.75	18.57	ug/L	-1	20	0.0500	u
MTBE	1.8042	1.8206	18.75	18.92	ug/L	1	20	0.0500	u
trans-1,2-Dichloroethene	0.5607	0.6398	18.75	21.40	ug/L	14	20	0.0500	u
Vinyl Acetate	1.4763	2.2443	18.75	28.50	ug/L	**52**	20	0.0500	c+ rsd u v+ ***
1,1-Dichloroethane	1.3302	1.4814	18.75	20.88	ug/L	11	20	0.1000	u
2-Butanone	0.4512	0.4638	18.75	19.28	ug/L	3	20	0.0500	u
cis-1,2-Dichloroethene	0.6508	0.6998	18.75	20.16	ug/L	8	20	0.0500	u
2,2-Dichloropropane	0.6245	0.9778	18.75	29.36	ug/L	**57**	20	0.0500	c+ u v+ ***
Chloroform	1.1050	1.2078	18.75	20.49	ug/L	9	20	0.0500	u
Bromochloromethane	0.2966	0.3329	18.75	21.05	ug/L	12	20	0.0500	u
1,1,1-Trichloroethane	0.6684	0.8231	18.75	23.09	ug/L	**23**	20	0.0500	c+ u ***
1,1-Dichloropropene	0.4771	0.5925	18.75	23.29	ug/L	**24**	20	0.0500	c+ u ***
Carbon Tetrachloride	0.3093	0.3941	18.75	23.89	ug/L	**27**	20	0.0500	c+ u ***
1,2-Dichloroethane	0.5373	0.6200	18.75	21.63	ug/L	15	20	0.0500	u
Benzene	1.4764	1.6516	18.75	20.98	ug/L	12	20	0.0500	u
Trichloroethene	0.3563	0.3859	18.75	20.31	ug/L	8	20	0.0500	u
1,2-Dichloropropane	0.4879	0.5333	18.75	20.49	ug/L	9	20	0.0500	u
Bromodichloromethane	0.4922	0.5556	18.75	21.17	ug/L	13	20	0.0500	u
Dibromomethane	0.2437	0.2705	18.75	20.81	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.5464	0.6005	18.75	20.61	ug/L	10	20	0.0500	u
cis-1,3-Dichloropropene	0.6236	0.7529	18.75	22.64	ug/L	**21**	20	0.0500	c+ u ***
Toluene	1.0349	1.0918	18.75	19.78	ug/L	5	20	0.0500	u
trans-1,3-Dichloropropene	0.6910	0.7555	18.75	20.50	ug/L	9	20	0.0500	u
1,1,2-Trichloroethane	0.2224	0.2543	18.75	21.44	ug/L	14	20	0.0500	u
2-Hexanone	0.4858	0.5262	18.75	20.31	ug/L	8	20	0.0500	u
1,3-Dichloropropane	0.7051	0.8125	18.75	21.61	ug/L	15	20	0.0500	u
Tetrachloroethene	0.3459	0.4133	18.75	22.40	ug/L	19	20	0.0500	u
Dibromochloromethane	0.3954	0.4497	18.75	21.32	ug/L	14	20	0.0500	u
1,2-Dibromoethane	0.3869	0.4373	18.75	21.19	ug/L	13	20	0.0500	u
Chlorobenzene	1.0346	1.1408	18.75	20.67	ug/L	10	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3459	0.3955	18.75	21.44	ug/L	14	20	0.0500	u
Ethylbenzene	1.8635	2.1304	18.75	21.44	ug/L	14	20	0.0500	u
m,p-Xylenes	0.6570	0.7396	37.50	42.22	ug/L	13	20	0.0500	u
o-Xylene	0.6512	0.7127	18.75	20.52	ug/L	9	20	0.0500	u
Styrene	1.1888	1.3086	18.75	20.64	ug/L	10	20	0.0500	u
Bromoform	0.2714	0.2977	18.75	20.57	ug/L	10	20	0.1000	u
Isopropylbenzene	3.2665	3.3382	18.75	19.16	ug/L	2	20	0.0500	u
1,1,2,2-Tetrachloroethane	0.9412	1.1376	18.75	22.66	ug/L	**21**	20	0.3000	c+ u ***

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,2,3-Trichloropropane	0.9136	1.0508	18.75	21.57	ug/L	15	20	0.0500	u
Propylbenzene	4.2647	5.0820	18.75	22.34	ug/L	19	20	0.0500	u
Bromobenzene	0.8845	0.9800	18.75	20.77	ug/L	11	20	0.0500	u
1,3,5-Trimethylbenzene	2.7013	3.1551	18.75	21.90	ug/L	17	20	0.0500	u
2-Chlorotoluene	2.8907	3.3442	18.75	21.69	ug/L	16	20	0.0500	u
4-Chlorotoluene	2.7428	3.0522	18.75	20.86	ug/L	11	20	0.0500	u
tert-Butylbenzene	2.1224	2.5068	18.75	22.15	ug/L	18	20	0.0500	u
1,2,4-Trimethylbenzene	2.7905	3.1356	18.75	21.07	ug/L	12	20	0.0500	u
sec-Butylbenzene	3.2955	4.0528	18.75	23.06	ug/L	**23**	20	0.0500	c+ u ***
para-Isopropyl Toluene	2.5799	2.9767	18.75	21.63	ug/L	15	20	0.0500	u
1,3-Dichlorobenzene	1.5676	1.7193	18.75	20.56	ug/L	10	20	0.0500	u
1,4-Dichlorobenzene	1.6423	1.7963	18.75	20.51	ug/L	9	20	0.0500	u
n-Butylbenzene	2.5751	3.2608	18.75	23.74	ug/L	**27**	20	0.0500	c+ u v+ ***
1,2-Dichlorobenzene	1.4998	1.6483	18.75	20.61	ug/L	10	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1600	0.1769	18.75	20.73	ug/L	11	20	0.0500	u
1,2,4-Trichlorobenzene	0.8867	0.9240	18.75	19.54	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.2858	0.3469	18.75	22.76	ug/L	**21**	20	0.0500	c+ u v+ ***
Naphthalene	1.8902	2.1741	18.75	21.57	ug/L	15	20	0.0500	u
1,2,3-Trichlorobenzene	0.7534	0.8295	18.75	20.64	ug/L	10	20	0.0500	u
Dibromofluoromethane	0.5675	0.5897	50.00	51.96	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3948	0.4386	50.00	55.55	ug/L	11	20	0.0500	u
Toluene-d8	1.4119	1.4354	50.00	50.83	ug/L	2	20	0.0500	u
Bromofluorobenzene	1.0845	1.0875	50.00	50.14	ug/L	0	20	0.0500	u

ISTD (ICAL ji818)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	520002	808155	55.41	11.03	11.02	-0.01
1,4-Difluorobenzene	857205	1322993	54.34	12.19	12.18	-0.01
Chlorobenzene-d5	685604	1069630	56.01	16.09	16.08	-0.01
1,4-Dichlorobenzene-d4	340706	530719	55.77	18.79	18.79	0.00

5% spike rule

Analyst: DNT Date: 10/02/09 Reviewer: LW Date: 10/02/09

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215063 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC514336 IDF : 1.0
Seqnum : 839393591011.5 File : kiu11 Time : 30-SEP-2009 11:57
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.6301	25.00	29.42	ug/L	18	20	0.0500	u
Chloromethane	0.5160	0.6018	25.00	29.16	ug/L	17	20	0.1000	u
Vinyl Chloride	0.5175	0.5993	25.00	28.95	ug/L	16	20	0.0500	u
Bromomethane	0.2608	0.3345	25.00	32.06	ug/L	**28**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.3546	25.00	21.65	ug/L	-13	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8131	25.00	27.41	ug/L	10	20	0.0500	u
Iodomethane	0.2599	0.4535	25.00	41.07	ug/L	**64**	20	0.0500	c+ u ***
Acetone	0.1382	0.1611	25.00	29.16	ug/L	17	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4394	25.00	29.31	ug/L	17	20	0.0500	u
Methylene Chloride	0.5280	0.5914	25.00	28.00	ug/L	12	20	0.0500	u
Carbon Disulfide	1.4090	1.5062	25.00	26.72	ug/L	7	20	0.0500	u
MTBE	1.5447	1.6688	25.00	27.01	ug/L	8	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5573	25.00	30.53	ug/L	**22**	20	0.0500	c+ u ***
Vinyl Acetate	0.9726	0.9690	25.00	24.91	ug/L	0	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0195	25.00	27.10	ug/L	8	20	0.1000	u
2-Butanone	0.2331	0.2606	25.00	27.95	ug/L	12	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6256	25.00	28.75	ug/L	15	20	0.0500	u
2,2-Dichloropropane	0.7134	0.8137	25.00	28.51	ug/L	14	20	0.0500	u
Chloroform	0.9238	0.9971	25.00	26.99	ug/L	8	20	0.0500	u
Bromochloromethane	0.2354	0.2827	25.00	30.02	ug/L	20	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.8260	25.00	29.36	ug/L	17	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4510	25.00	26.74	ug/L	7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3804	25.00	27.30	ug/L	9	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4392	25.00	25.00	ug/L	0	20	0.0500	u
Benzene	1.3404	1.4402	25.00	26.86	ug/L	7	20	0.0500	u
Trichloroethene	0.3158	0.3674	25.00	29.09	ug/L	16	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3724	25.00	25.90	ug/L	4	20	0.0500	u
Bromodichloromethane	0.3863	0.4383	25.00	28.36	ug/L	13	20	0.0500	u
Dibromomethane	0.1802	0.2007	25.00	27.85	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2938	25.00	24.13	ug/L	-3	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.6019	25.00	29.12	ug/L	16	20	0.0500	u
Toluene	0.9593	0.9220	25.00	24.03	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5009	25.00	21.85	ug/L	-13	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1656	25.00	23.67	ug/L	-5	20	0.0500	u
2-Hexanone	0.2445	0.2162	25.00	22.10	ug/L	-12	20	0.0500	u
1,3-Dichloropropane	0.6133	0.5724	25.00	23.33	ug/L	-7	20	0.0500	u
Tetrachloroethene	0.3329	0.3325	25.00	24.97	ug/L	0	20	0.0500	u
Dibromochloromethane	0.3027	0.3065	25.00	25.31	ug/L	1	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3007	25.00	24.66	ug/L	-1	20	0.0500	u
Chlorobenzene	1.0519	1.0074	25.00	23.94	ug/L	-4	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3305	25.00	24.61	ug/L	-2	20	0.0500	u
Ethylbenzene	1.8115	1.7802	25.00	24.57	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.6304	0.5962	50.00	47.29	ug/L	-5	20	0.0500	u
o-Xylene	0.6283	0.5783	25.00	23.01	ug/L	-8	20	0.0500	u
Styrene	1.0367	0.9961	25.00	24.02	ug/L	-4	20	0.0500	u
Bromoform	0.1849	0.1969	25.00	23.05	ug/L	-8	20	0.1000	u
Isopropylbenzene	3.8595	3.6192	25.00	23.44	ug/L	-6	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9727	25.00	25.36	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1401	25.00	27.85	ug/L	11	20	0.0500	u
Propylbenzene	3.9448	3.5374	25.00	22.42	ug/L	-10	20	0.0500	u
Bromobenzene	1.0220	1.1748	25.00	28.74	ug/L	15	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.1201	25.00	28.44	ug/L	14	20	0.0500	u
2-Chlorotoluene	3.1099	3.3160	25.00	26.66	ug/L	7	20	0.0500	u
4-Chlorotoluene	2.6572	2.6074	25.00	24.53	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.7712	25.00	20.39	ug/L	-18	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.1389	25.00	29.74	ug/L	19	20	0.0500	u
sec-Butylbenzene	3.1284	2.5641	25.00	20.49	ug/L	-18	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.5448	25.00	25.51	ug/L	2	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6948	25.00	25.07	ug/L	0	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5847	25.00	23.95	ug/L	-4	20	0.0500	u
n-Butylbenzene	2.4331	2.7840	25.00	36.35	ug/L	**45**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6379	25.00	25.40	ug/L	2	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1760	25.00	25.01	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.3136	25.00	30.19	ug/L	**21**	20	0.0500	c+ u ***
Hexachlorobutadiene	0.4373	0.4177	25.00	23.88	ug/L	-4	20	0.0500	u
Naphthalene	2.7279	3.5846	25.00	32.85	ug/L	**31**	20	0.0500	c+ u ***
1,2,3-Trichlorobenzene	1.0079	1.2748	25.00	31.62	ug/L	**26**	20	0.0500	c+ u ***
Dibromofluoromethane	0.4472	0.4591	50.00	51.33	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3625	50.00	48.50	ug/L	-3	20	0.0500	u
Toluene-d8	1.4811	1.3247	50.00	44.72	ug/L	-11	20	0.0500	u
Bromofluorobenzene	1.2424	1.4000	50.00	56.34	ug/L	13	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1727388	14.75	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3007676	22.92	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3083930	44.37	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1072157	9.02	17.10	17.10	0.00

5% spike rule

Analyst: DNT Date: 10/02/09 Reviewer: LW Date: 10/02/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 499392292

Date : 09/29/09 Reference : ji818
Sequence : MSVOA10 jit Analyzed : 09/09/09 06:08

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	520002	11.03	857205	12.19	685604	16.09	340706	18.79
		LOWER LIMIT	260001	10.53	428603	11.69	342802	15.59	170353	18.29
		UPPER LIMIT	1040004	11.53	1714410	12.69	1371208	16.59	681412	19.29
003	CCV/BS	QC514129	808155	11.02	1322993	12.18	1069630	16.08	530719	18.79
004	BSD	QC514130	809459	11.02	1331938	12.18	1071137	16.09	536168	18.78
006	BLANK	QC514128	801824	11.02	1315420	12.18	1081998	16.08	530861	18.79
007	SAMPLE	215152-003	865733	11.02	1392022	12.17	1137179	16.08	563852	18.79
008	SAMPLE	215063-001	818869	11.02	1330168	12.18	1094727	16.08	541391	18.79
009	SAMPLE	215063-002	796665	11.03	1304673	12.18	1061168	16.09	522041	18.79
010	SAMPLE	215063-003	816504	11.02	1332032	12.18	1086783	16.09	535335	18.79
011	SAMPLE	215063-004	830575	11.02	1376842	12.18	1119550	16.08	542379	18.79
012	SAMPLE	215063-005	825662	11.02	1371824	12.18	1101567	16.08	534512	18.79
013	SAMPLE	215063-006	865532	11.03	1427950	12.18	1150734	16.09	563004	18.78
014	SAMPLE	215063-007	871251	11.03	1425773	12.18	1165595	16.09	568207	18.78
015	SAMPLE	215063-008	885940	11.03	1455552	12.19	1190247	16.09	583516	18.78
016	SAMPLE	215065-005	866326	11.03	1424844	12.19	1184685	16.09	575694	18.79
017	SAMPLE	215065-006	800033	11.03	1342885	12.19	1091956	16.09	524214	18.79
018	SAMPLE	215065-008	884571	11.03	1464066	12.19	1179447	16.09	574155	18.78
019	SAMPLE	215065-009	849813	11.03	1406879	12.18	1133347	16.08	561943	18.78
020	SAMPLE	215065-011	812271	11.03	1354536	12.18	1113022	16.08	541659	18.78

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839393591

Date : 09/30/09 Reference : kif12
Sequence : MSVOA11 kiu Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
011	CCV/LCS	QC514336	1727388	10.81	3007676	11.74	3083930	14.82	1072157	17.10
013	BLANK	QC514337	1616476	10.81	2902684	11.74	2965899	14.82	877907	17.10
014	SAMPLE	215010-011	1535433	10.81	2765732	11.74	2839069	14.82	833669	17.10
015	SAMPLE	215063-008	1524607	10.81	2759955	11.74	2827380	14.83	845729	17.10
016	SAMPLE	215063-009	1481004	10.81	2654320	11.74	2753660	14.83	855562	17.10
017	SAMPLE	215063-010	1438519	10.82	2598057	11.74	2681890	14.82	833617	17.10
018	SAMPLE	215030-001	1414639	10.81	2577922	11.74	2663136	14.83	792849	17.10
019	SAMPLE	215031-002	1363862	10.81	2505743	11.74	2624360	14.82	807770	17.10
020	SAMPLE	215031-001	1354832	10.81	2488331	11.74	2593576	14.82	784287	17.10
021	SAMPLE	215032-001	1337261	10.81	2471204	11.74	2584855	14.82	772916	17.10
022	SAMPLE	215010-009	1294835	10.81	2386534	11.74	2519583	14.82	805600	17.10
023	SAMPLE	215031-001	1312140	10.81	2406978	11.74	2543996	14.82	793702	17.10
024	SAMPLE	215072-001	1275963	10.81	2368883	11.74	2492201	14.82	786162	17.10
025	SAMPLE	215064-001	1276629	10.81	2353291	11.74	2516479	14.82	810167	17.10
026	SAMPLE	215064-002	1292449	10.82	2385988	11.74	2536468	14.83	756692	17.10
027	SAMPLE	215064-003	1289627	10.82	2381981	11.74	2508312	14.82	778745	17.10
028	SAMPLE	215064-004	1262016	10.81	2327612	11.74	2507022	14.82	804619	17.10
029	MSS	215064-005	1462134	10.81	2629954	11.74	2846614	14.82	931779	17.10
030	SAMPLE	215064-006	1738074	10.81	3083472	11.74	3251245	14.83	1059152	17.10
031	SAMPLE	215064-007	1723707	10.81	3062601	11.74	3216630	14.83	981260	17.10
032	SAMPLE	215064-008	1657110	10.82	2947441	11.74	3096470	14.83	966559	17.10
033	SAMPLE	215064-009	1558594	10.81	2788777	11.74	2939638	14.82	870385	17.10
034	MS	QC514399	1538208	10.81	2781765	11.74	2939831	14.82	1086195	17.10
035	MSD	QC514400	1700259	10.81	3011334	11.74	3243805	14.82	1275926	17.10
040	SAMPLE	215294-004	1507277	10.81	2716318	11.74	2845909	14.82	908841	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499361940

Instrument : MSVOA10 Begun : 09/08/09 08:20
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji801	X	IB			09/08/09 08:20	1.0	1	
002	ji802	X	IB			09/08/09 08:54	1.0	1	
003	ji803	X	IB			09/08/09 12:48	1.0	1	
004	ji804	X	LOW PT			09/08/09 13:23	1.0	1	
005	ji805	X	IB			09/08/09 16:27	1.0	1	
006	ji806	X	LOW PT			09/08/09 17:01	1.0	1	
007	ji807	TUN	BFB			09/08/09 18:22	1.0	2	
008	ji808	TUN	BFB			09/09/09 00:19	1.0	2	
009	ji809	X	IB BAKE			09/09/09 00:42	1.0	1	
010	ji810	X	IB			09/09/09 01:33	1.0	1	
011	ji811	IB	CALIB IB			09/09/09 02:08	1.0	1	
012	ji812	ICAL	.25/0.5PPB			09/09/09 02:42	1.0	3 4 5 6 1	
013	ji813	ICAL	0.5/1PPB			09/09/09 03:16	1.0	3 4 5 6 1	
014	ji814	ICAL	2PPB			09/09/09 03:51	1.0	3 4 5 6 1	
015	ji815	ICAL	5PPB			09/09/09 04:25	1.0	3 4 5 6 1	
016	ji816	ICAL	10PPB			09/09/09 04:59	1.0	3 4 5 6 1	
017	ji817	ICAL	20PPB			09/09/09 05:34	1.0	3 4 5 6 1	
018	ji818	ICAL	50PPB			09/09/09 06:08	1.0	3 4 5 6 1	
019	ji819	ICAL	75PPB			09/09/09 06:42	1.0	3 4 5 6 1	
020	ji820	ICAL	100PPB			09/09/09 07:17	1.0	3 4 5 6 1	

BO 09/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

Standards used: 1=S12692 2=S12404 3=S12733 4=S12773 5=S12217 6=S12685

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499363592

Instrument : MSVOA10 Begun : 09/09/09 11:52
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji901	X	BFB			09/09/09 11:52	1.0	1	
002	ji902	X	BFB			09/09/09 12:05	1.0	1	
003	ji903	X	BFB			09/09/09 12:25	1.0	1	
004	ji904	X	BFB			09/09/09 13:31	1.0	1	
005	ji905	X	20PPB			09/09/09 14:02	1.0	2 3 4 5 6	
006	ji906	TUN	BFB			09/09/09 14:47	1.0	1	
007	ji907	CCV	20PPB			09/09/09 15:04	1.0	2 3 4 5 6	
008	ji908	ICV/BS	QC511299	Water	154716	09/09/09 16:12	1.0	7 8 9 10 6	
009	ji909	X	QC511300	Water	154716	09/09/09 16:47	1.0	7 8 9 10 6	
010	ji910	X	IB			09/09/09 17:20	1.0	6	
011	ji911	BSD	QC511300	Water	154716	09/09/09 17:55	1.0	6 7 8 9 10	
012	ji912	X	IB			09/09/09 18:28	1.0	6	
013	ji913	BLANK	QC511301	Water	154716	09/09/09 19:03	1.0	6	
014	ji914	SAMPLE	214564-003	Water	154716	09/09/09 19:37	1.0	6	
015	ji915	SAMPLE	214552-017	Water	154716	09/09/09 20:11	1.0	6	
016	ji916	SAMPLE	214664-001	Water	154716	09/09/09 20:45	1.0	6	
017	ji917	SAMPLE	214574-008	Water	154716	09/09/09 21:19	1.0	6	
018	ji918	SAMPLE	214574-007	Water	154716	09/09/09 21:53	1.0	6	
019	ji919	SAMPLE	214574-009	Water	154716	09/09/09 22:27	1.0	6	
020	ji920	SAMPLE	214574-010	Water	154716	09/09/09 23:01	1.0	6	
021	ji921	SAMPLE	214574-011	Water	154716	09/09/09 23:35	1.0	6	
022	ji922	SAMPLE	214574-001	Water	154716	09/10/09 00:09	4.0	6	
023	ji923	MSS	214574-002	Water	154716	09/10/09 00:43	14.29	6	
024	ji924	SAMPLE	214564-002	Water	154716	09/10/09 01:17	6.25	6	
025	ji925	MS	QC511345	Water	154716	09/10/09 01:51	14.29	6 7 8 9 10	
026	ji926	MSD	QC511346	Water	154716	09/10/09 02:25	14.29	6 7 8 9 10	
027	ji927	X	IB			09/10/09 02:59	1.0	6	
028	ji928	X	IB			09/10/09 03:33	1.0	6	
029	ji929	X	IB			09/10/09 04:07	1.0	6	
030	ji930	X	IB			09/10/09 04:42	1.0	6	
031	ji931	X	IB			09/10/09 05:16	1.0	6	

BO 09/09/09 : ji903, ji906, adjusted tune

HDD 09/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

HDD 09/10/09 : MSS over dilute,MS/MSD not used

LW 09/11/09 : Matrix spikes QC511345,QC511346 (batch 154716) were not reported because the parent sample was reanalyzed in another batch.

Analyst: HDD Date: 09/10/09 Reviewer: LW Date: 09/11/09

Standards used: 1=S12404 2=S12733 3=S12773 4=S12217 5=S12685 6=S12692 7=S12922 8=S12589 9=S12693 10=S12845

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499392292

Instrument : MSVOA10 Begun : 09/29/09 10:12
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jit01	X	IB			09/29/09 10:12	1.0	1	
002	jit02	TUN	BFB			09/29/09 11:11	1.0	2	
003	jit03	CCV/BS	QC514129	Water	155421	09/29/09 11:51	1.0	3 4 5 1	
004	jit04	BSD	QC514130	Water	155421	09/29/09 12:25	1.0	3 4 5 1	
005	jit05	X	IB			09/29/09 12:59	1.0	1	
006	jit06	BLANK	QC514128	Water	155421	09/29/09 13:34	1.0	1	
007	jit07	SAMPLE	215152-003	Water	155421	09/29/09 14:08	1.0	1	
008	jit08	SAMPLE	215063-001	Water	155421	09/29/09 14:42	1.0	1	
009	jit09	SAMPLE	215063-002	Water	155421	09/29/09 15:16	1.0	1	
010	jit10	SAMPLE	215063-003	Water	155421	09/29/09 15:51	1.0	1	
011	jit11	SAMPLE	215063-004	Water	155421	09/29/09 16:25	1.0	1	
012	jit12	SAMPLE	215063-005	Water	155421	09/29/09 16:58	1.0	1	
013	jit13	SAMPLE	215063-006	Water	155421	09/29/09 17:32	1.0	1	
014	jit14	SAMPLE	215063-007	Water	155421	09/29/09 18:06	1.0	1	
015	jit15	SAMPLE	215063-008	Water	155421	09/29/09 18:40	1.0	1	
016	jit16	SAMPLE	215065-005	Water	155421	09/29/09 19:14	1.0	1	
017	jit17	SAMPLE	215065-006	Water	155421	09/29/09 19:48	1.0	1	
018	jit18	SAMPLE	215065-008	Water	155421	09/29/09 20:22	1.0	1	1:TCE=110
019	jit19	SAMPLE	215065-009	Water	155421	09/29/09 20:56	1.0	1	
020	jit20	SAMPLE	215065-011	Water	155421	09/29/09 21:29	1.0	1	

DNT 09/29/09 : Worked up through jit07

DNT 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

DNT 09/29/09 : Matrix spikes were not performed for this analysis in batch 155421 due to insufficient sample amount.

LW 09/29/09 : Sequence reviewed through file jit07

MJD 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 20.

Analyst: MJD Date: 09/30/09 Reviewer: LW Date: 09/30/09

Standards used: 1=S13008 2=S12404 3=S12922 4=S12996 5=S12693

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839393591

Instrument : MSVOA11 Begun : 09/30/09 07:51
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kiu01	X	IB			09/30/09 07:51	1.0	1	
002	kiu02	X	BFB			09/30/09 08:15	1.0	2	
003	kiu03	X	QC514336	Water	155470	09/30/09 08:28	1.0	3 4 5 6 1	
004	kiu04	X	BFB			09/30/09 09:00	1.0	2	
005	kiu05	X	QC514336	Water	155470	09/30/09 09:13	1.0	3 4 5 6 1	
006	kiu06	X	BFB			09/30/09 09:49	1.0	2	
007	kiu07	X	QC514336	Water	155470	09/30/09 10:18	1.0	3 4 5 6 1	
008	kiu08	X	BFB			09/30/09 11:05	1.0	2	
009	kiu09	X	QC514336	Water	155470	09/30/09 11:17	1.0	3 4 5 6 1	
010	kiu10	TUN	BFB			09/30/09 11:44	1.0	2	
011	kiu11	CCV/LCS	QC514336	Water	155470	09/30/09 11:57	1.0	3 4 5 6 1	
012	kiu12	X	IB			09/30/09 12:25	1.0	1	
013	kiu13	BLANK	QC514337	Water	155470	09/30/09 12:54	1.0	1	
014	kiu14	SAMPLE	215010-011	Water	155470	09/30/09 13:22	1.0	1	
015	kiu15	SAMPLE	215063-008	Water	155470	09/30/09 13:50	1.0	1	
016	kiu16	SAMPLE	215063-009	Water	155470	09/30/09 14:19	1.0	1	
017	kiu17	SAMPLE	215063-010	Water	155470	09/30/09 14:47	1.0	1	
018	kiu18	SAMPLE	215030-001	Water	155470	09/30/09 15:15	1.0	1	pH > 2
019	kiu19	SAMPLE	215031-002	Water	155470	09/30/09 15:43	1.0	1	pH > 2
020	kiu20	SAMPLE	215031-001	Water	155470	09/30/09 16:12	4.0	1	pH > 2, 1:TCE=110
021	kiu21	SAMPLE	215032-001	Water	155470	09/30/09 16:40	25.0	1	pH > 2
022	kiu22	SAMPLE	215010-009	Water	155470	09/30/09 17:08	1.0	1	
023	kiu23	SAMPLE	215031-001	Water	155470	09/30/09 17:37	7.143	1	pH > 2
024	kiu24	SAMPLE	215072-001	Water	155470	09/30/09 18:05	1.0	1	headspace <= 1 mL
025	kiu25	SAMPLE	215064-001	Water	155470	09/30/09 18:33	1.0	1	
026	kiu26	SAMPLE	215064-002	Water	155470	09/30/09 19:01	1.0	1	
027	kiu27	SAMPLE	215064-003	Water	155470	09/30/09 19:30	1.0	1	
028	kiu28	SAMPLE	215064-004	Water	155470	09/30/09 19:58	1.0	1	
029	kiu29	MSS	215064-005	Water	155470	09/30/09 20:26	1.0	1	
030	kiu30	SAMPLE	215064-006	Water	155470	09/30/09 20:54	1.0	1	
031	kiu31	SAMPLE	215064-007	Water	155470	09/30/09 21:23	1.0	1	
032	kiu32	SAMPLE	215064-008	Water	155470	09/30/09 21:51	1.0	1	
033	kiu33	SAMPLE	215064-009	Water	155470	09/30/09 22:19	1.0	1	
034	kiu34	MS	QC514399	Water	155470	09/30/09 22:47	1.0	1 3 4 5 6	
035	kiu35	MSD	QC514400	Water	155470	09/30/09 23:16	1.0	1 3 4 5 6	
036	kiu36	X	IB			09/30/09 23:44	1.0	1	
037	kiu37	X	IB			10/01/09 00:12	1.0	1	
038	kiu38	X	IB			10/01/09 00:41	1.0	1	
039	kiu39	X	IB			10/01/09 01:09	1.0	1	
040	kiu40	SAMPLE	215294-004	Water	155486	10/01/09 01:37	1.0	1	

BO 09/30/09 : kiu04, kiu06, kiu08, kiu10, adjusted tune

DNT 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 40.

Analyst: DNT Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S12947 2=S12404 3=S12996 4=S12845 5=S12693 6=S12924

Page 1 of 1

GC/MS VOLATILE ORGANICS

Batch #: MJP 9/29/09 155421

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1									MJP 9/29/09
2	215065-5	B	<2				10	1X	
3	-6								
4	-7		<2			3		2X	rie 9/29/09
5	-8							1X	
6	-9								
7	-10		<2			4		2X	rie 9/29/09
8	-11							1X	MJP 9/29/09
9	215152-3	A	<2					TB	
10	215063-1							TB	
11	2							1X	
12	3								
13	4							1X	
14	5								
15	6								
16	7								
17	8								
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155470

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215063-8	B	<2				11	mm 1x, Acc 1cv 1	2cè 9/30/09
2	215072-1	A		5mL				TB 1mL HJ	
3	215064-1							1x	
4	-2								
5	-3								
6	-4								
7	-5							MSS	
8	-6								
9	-7								
10	-8								
11	-9								
12	-5	BCD	<2					MS/MSD	
13	215063-9*	A						1x hold 9/30	
14	-10*							1x	
15	215030-1*	B	7					1x	
16	215031-1*		7			4		4x	DLT 9/30/09
17	-2*							1x	2cè 9/30/09
18	215032-1*		7			6		25x	DLT 9/30/09
19	215010-9	A	<2					1x	2cè 9/30/09
20	-10		—					- DILTOFF	
21	-11*	A	<2					TB hold 9/30	
22	X								
23									
24	215294-4	A	<2				11	old TVH Blank	2cè 9/30/09
25	215031-001	C	6			6	11	RR@7.14x >LR trichloroethene hold 9/30	DLT 9/30/09
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 215064
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091709B	215064-001
ASE-41B-9C1	215064-002
ASE-40B-9C1	215064-003
PL-105A-9C1	215064-004
ASE-108A-9C1	215064-005
PL-529-9C1	215064-006
ASE-62A-9C1	215064-007
ASE-47B-9C1	215064-008
ASE-26A-9C1	215064-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/06/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215064**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/18/09**
Samples Received:	**09/18/09**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 09/18/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High responses were observed for many analytes in the CCV analyzed 09/30/09 11:57; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for iodomethane and vinyl acetate in the CCV analyzed 10/01/09 16:14; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for chloroethane; affected data was qualified with "b".

High response was observed for chloroethane in the CCV analyzed 10/01/09 10:46.

High recoveries were observed for a number of analytes in the LCS for batch 155470; these analytes were not detected at or above the RL in the associated samples.

Low recoveries were observed for sec-butylbenzene and benzene in the MSD of ASE-108A-9C1 (lab # 215064-005); the LCS was within limits, and the associated RPDs were within limits. High recoveries were observed for a number of analytes in the MS/MSD of ASE-108A-9C1 (lab # 215064-005); the associated RPDs were within limits.

Low recovery was observed for iodomethane in the BS for batch 155528; the associated RPD was within limits.

No other analytical problems were encountered.

Chain of Custody

25064

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2231

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		

Privileged & Confidential

Site Name: Sky Harbor
Location of Site: Phoenix, AZ
Phase:
Sampling Program: Quarterly UST

Sampling Co.: H+A
EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)
CH2M HILL
2625 South Plaza Drive, Suite 300
Tempe, AZ 85282
Sampler: M. Weise - D. Foehr - M. HALL
PO # 5101516
Analysis Turnaround Time (TAT): 14
Consultant
Preliminary Data To: Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL
Hard Copy To: Jennifer Peterson, CH2M HILL
Full Report TAT: 14
Invoice To: Honeywell/Copy J Peterson

Text & Excel File Drive: Excel & Text File Drive

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	TB	--	--	TB-091709B	9/17/9	0005	BLK WATR	WATR	TB	1	--	--	X														
2	ASE-41B	--	109	ASE-41B-9C1	9/17/9	0043	Grab	WATR	Reg	3	G	N	X														
3	ASE-40B	--	111	ASE-40B-9C1	9/17/9	0124	Grab	WATR	Reg	3	G	N	X														
4	PL-105A	--	77	PL-105A-9C1	9/17/9	0200	Grab	WATR	Reg	4	G	N	X	X													
5	ASE-108A	--	98	ASE-108A-9C1	9/17/9	0229	Grab	WATR	Reg	12	G	N	X	X											X		
6	PL-529	--	--	PL-529-9C1	9/17/9	0239	BLKWATR	WATR	ERB	4	G	N	X	X													
7	ASE-62A	--	91	ASE-62A-9C1	9/17/9	0315	Grab	WATR	Reg	4	G	N	X	X													
8	ASE-47B	--	194	ASE-47B-9C1	9/17/9	0410	Grab	WATR	Reg	3	G	N	X														
9	ASE-26A	--	95	ASE-26A-9C1	9/17/9	0501	Grab	WATR	Reg	3	G	N	X														
10																											
11																											
12																											

Relinquished by	Company: H+A	Received by	Company: Fed Ex	Condition		Custody Seals Intact	
	Date/Time: 09/17/09 16:00		Date/Time: 09/17/09 16:00	Cooler Temp.			
Relinquished by	Company	Received by	Company: CDT	Condition	GOOD	Custody Seals Intact	YES
	Date/Time		Date/Time: 9/18/09	Cooler Temp. 3.9/2.6			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 215064 Date Received 9/18/09 Number of coolers 2
Client CH2M HILL Project SKY HARBOR

Date Opened 9/18/09 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in 9/21/09 By (print) [illegible] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) ____ YES NO
   Shipping info FEDEX 7955042676 75 / 8421 9354 3050
2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name [illegible] Date 9/17/09
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.4, 2.6

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES NO
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ YES NO
10. Are samples in the appropriate containers for indicated tests? ____ YES NO
11. Are sample labels present, in good condition and complete? ____ YES NO
12. Do the sample labels agree with custody papers? ____ YES NO
13. Was sufficient amount of sample sent for tests requested? ____ YES NO
14. Are the samples appropriately preserved? ____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
16. Was the client contacted concerning this sample delivery? ____ YES NO
    If YES, Who was called? ____ By ____ Date: ____

COMMENTS
TB 1 VOA w/ BUBBLE

Laboratory Job Number 215064

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/17/09
Units:	ug/L	Received:	09/18/09
Diln Fac:	1.000	Prepared:	09/23/09
Batch#:	155240	Analyzed:	09/28/09

Field ID: PL-105A-9C1 Lab ID: 215064-004
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	3,300	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-108A-9C1 Lab ID: 215064-005
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,900	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Field ID: PL-529-9C1 Lab ID: 215064-006
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/17/09
Units:	ug/L	Received:	09/18/09
Diln Fac:	1.000	Prepared:	09/23/09
Batch#:	155240	Analyzed:	09/28/09

Field ID: ASE-62A-9C1 Lab ID: 215064-007
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Type: BLANK Lab ID: QC513380

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513381	Batch#:	155240
Matrix:	Water	Prepared:	09/23/09
Units:	ug/L	Analyzed:	09/28/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,133	85	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-108A-9C1	Batch#:	155240
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Prepared:	09/23/09
Diln Fac:	1.000	Analyzed:	09/28/09

Type: MS Lab ID: QC513382

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	1,887	2,500	4,304	97	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Type: MSD Lab ID: QC513383

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	4,293	96	54-120	0	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

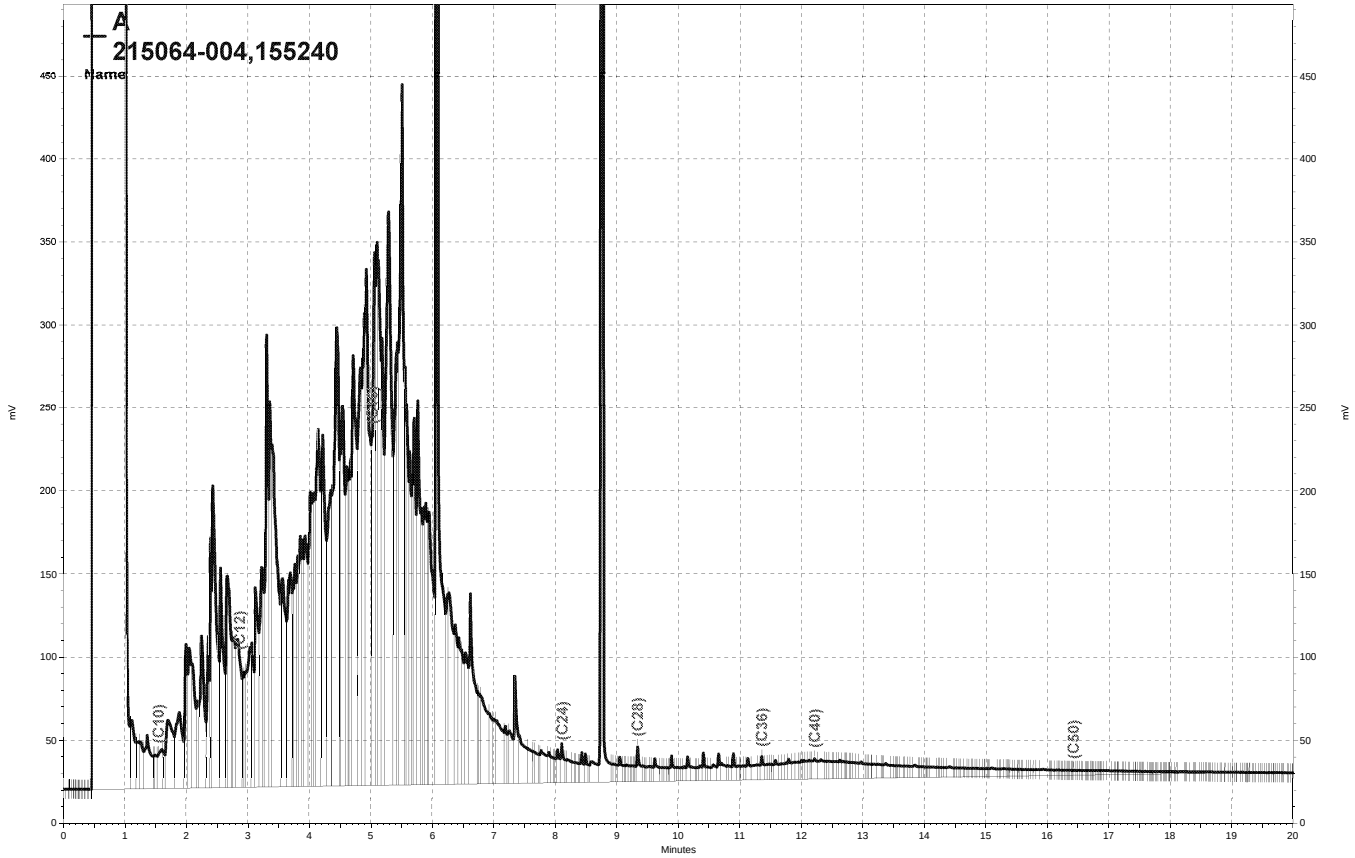
Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513384	Batch#:	155240
Matrix:	Water	Prepared:	09/23/09
Units:	ug/L	Analyzed:	09/28/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	3,164	127	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	



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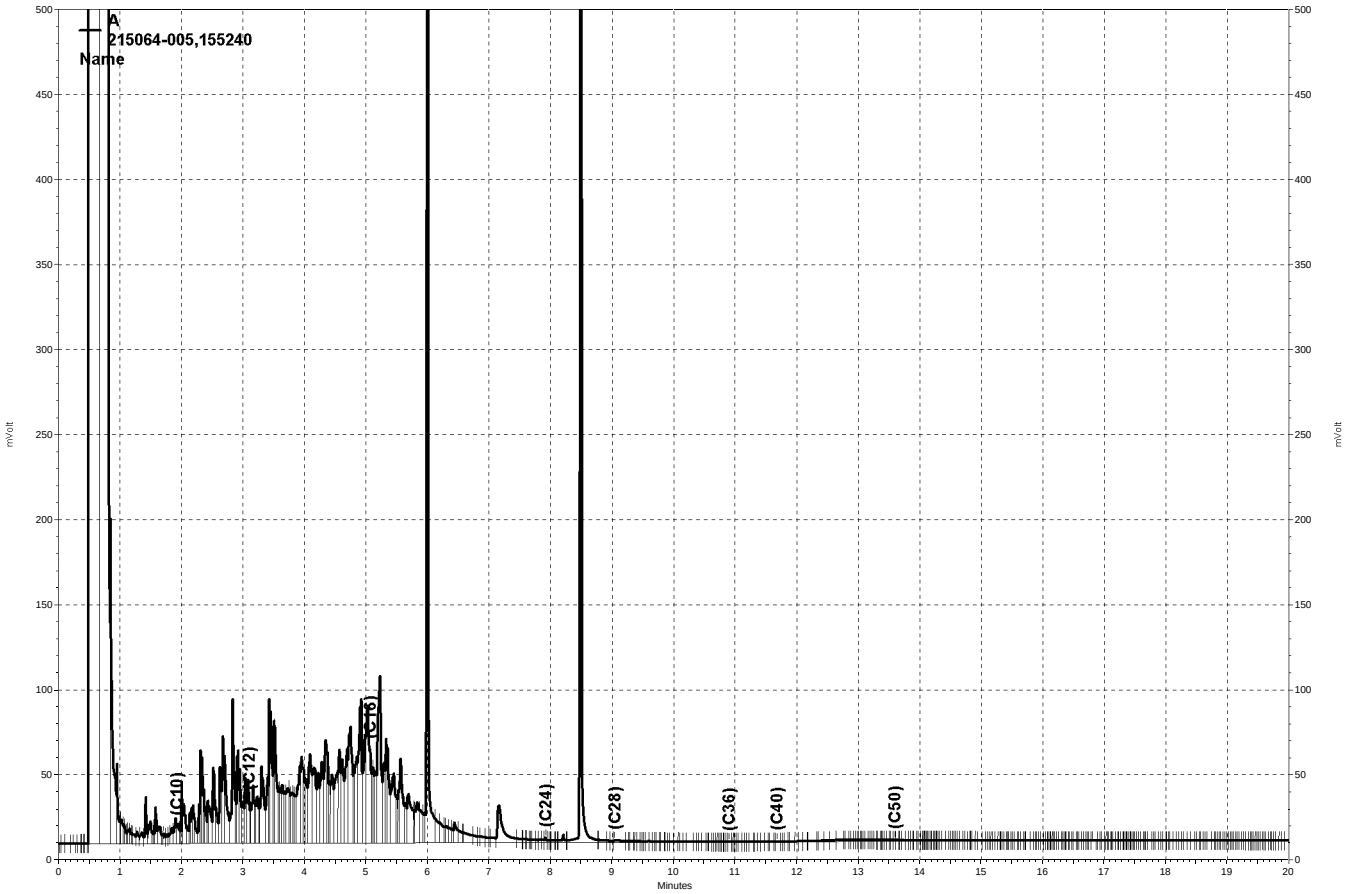

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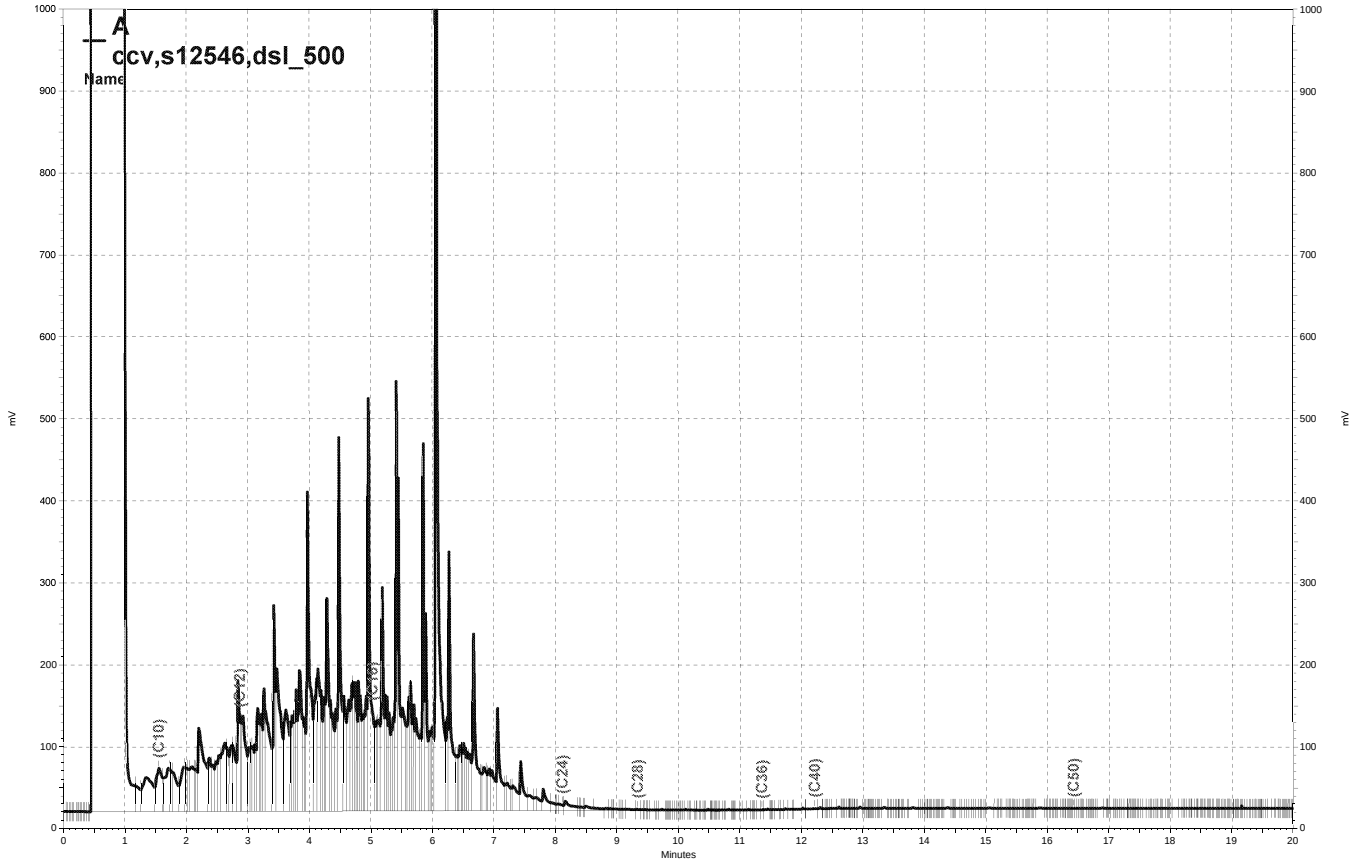

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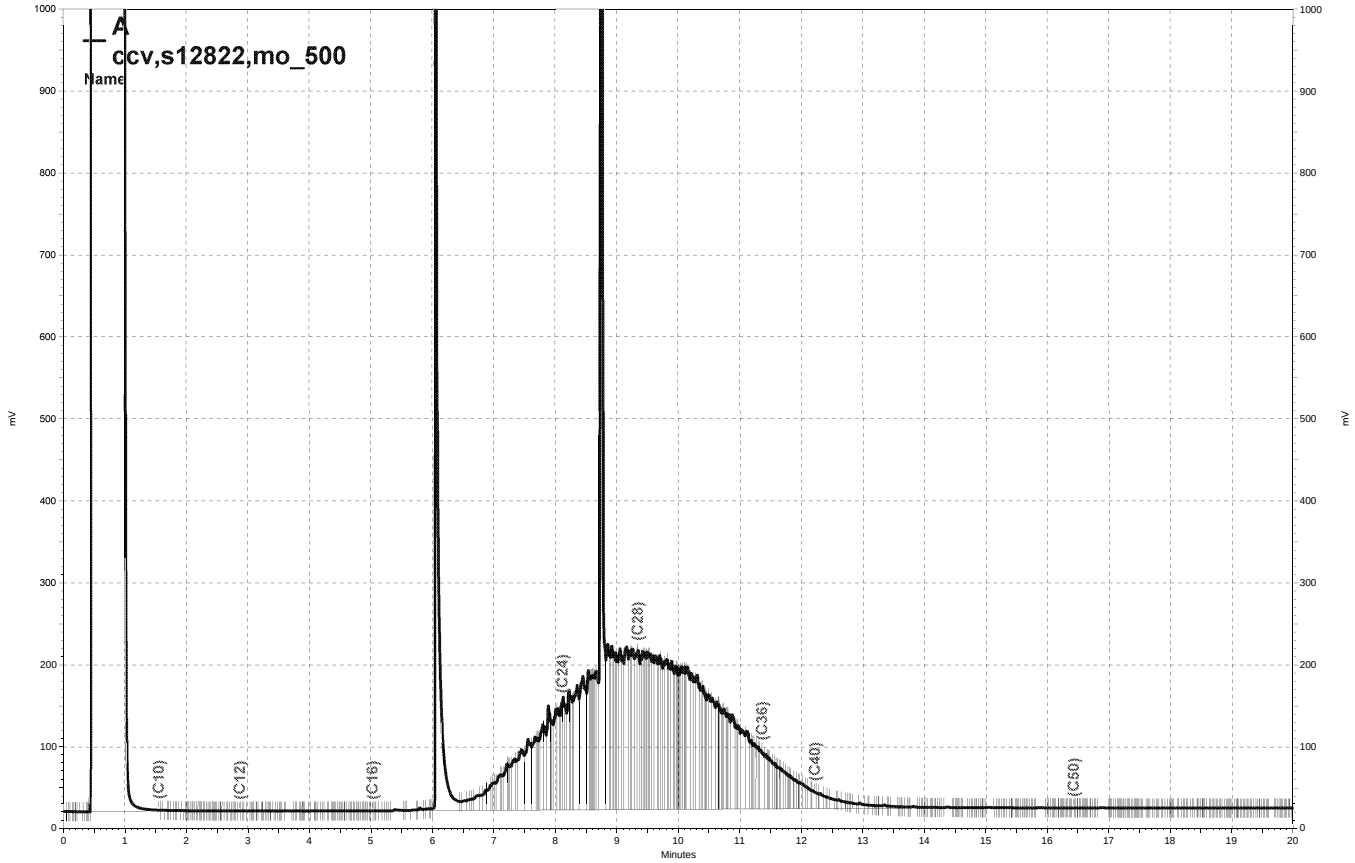

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CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179150420002
Units : mg/L

Name : DSL_104
Date : 14-APR-2009 20:09
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	104a020	179150420020	DSL_10	14-APR-2009 20:09	S10988
L2	104a021	179150420021	DSL_100	14-APR-2009 20:37	S10989
L3	104a022	179150420022	DSL_500	14-APR-2009 21:04	S10987 (10X)
L4	104a023	179150420023	DSL_1000	14-APR-2009 21:32	S10991
L5	104a024	179150420024	DSL_5000	14-APR-2009 22:00	S10987
L6	104a025	179150420025	DSL_7500	14-APR-2009 22:27	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	62853	72410	69018	70005	70165	71385	AVRG		1.44E-5		69306	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-9	100.0	4	500.0	0	1000	1	5000	1	7500	3

JDG 04/15/09 : DSL_100: integrated fuel hump.

Analyst: JDG Date: 04/15/09 Reviewer: ATL Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215064 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 179150420002

Name : DSL_104
Cal Date : 14-APR-2009

ICV 179150420027 (104a027 14-APR-2009) stds: S11498

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	474.5	mg/L	-5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179253466002
Units : mg/L

Name : OTPHEX_176
Date : 24-JUN-2009 21:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	176a003	179253466003	HEXOTP_5	24-JUN-2009 21:13	S11524
L2	176a004	179253466004	HEXOTP_10	24-JUN-2009 21:41	S11525
L3	176a005	179253466005	HEXOTP_25	24-JUN-2009 22:09	S11526
L4	176a006	179253466006	HEXOTP_50	24-JUN-2009 22:36	S11708
L5	176a007	179253466007	HEXOTP_100	24-JUN-2009 23:04	S11528

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	79786	93573	89882	73000	84521	AVRG		1.19E-5		84152	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	5.000	-5	10.00	11	25.00	7	50.00	-13	100.0	0

Analyst: JDG Date: 06/25/09 Reviewer: CW Date: 06/25/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179344632001
Units : mg/L

Name : Motor Oil_239
Date : 28-AUG-2009 20:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	239a023	179344632023	MO_50	28-AUG-2009 20:14	S12675
L2	239a024	179344632024	MO_250	28-AUG-2009 20:42	S12676
L3	239a025	179344632025	MO_500	28-AUG-2009 21:09	S12677
L4	239a026	179344632026	MO_1000	28-AUG-2009 21:36	S12678
L5	239a027	179344632027	MO_5000	28-AUG-2009 22:04	S12679
L6	239a028	179344632028	MO_7500	28-AUG-2009 22:31	S12680

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	54568	56522	48923	54207	54958	48382	AVRG		1.89E-5		52927	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	3	250.0	7	500.0	-8	1000	2	5000	4	7500	-9

TFB 08/31/09 : All levels & IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/31/09 Reviewer: CP Date: 08/31/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215064 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 179390704004 File : 271a004 Time : 28-SEP-2009 09:06
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	179150420002	14-APR-2009	69306	70698	500.0	510.0	mg/L	2	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	82613	50.00	49.09	mg/L	-2	15	

TFB 09/29/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179390704005 File : 271a005 Time : 28-SEP-2009 09:34
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	179344632001	28-AUG-2009	52927	55317	500.0	522.6	mg/L	5	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	85809	50.00	50.98	mg/L	2	15	

TFB 09/29/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 179390704018 File : 271a018 Time : 28-SEP-2009 20:54
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	179150420002	14-APR-2009	69306	69417	250.0	250.4	mg/L	0	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	80242	50.00	47.68	mg/L	-5	15	

TFB 09/28/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179390704019 File : 271a019 Time : 28-SEP-2009 21:21
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	179344632001	28-AUG-2009	52927	52184	500.0	493.0	mg/L	-1	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	84006	50.00	49.91	mg/L	0	15	

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
Seqnum : 869390814010 File : 271a010 Time : 28-SEP-2009 14:37
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26202	500.0	541.9	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29326	50.00	52.20	mg/L	4	15	

TFB 09/28/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/28/09 Reviewer: EAH Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869390814011 File : 271a011 Time : 28-SEP-2009 15:05
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	20162	500.0	556.5	mg/L	11	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31758	50.00	56.53	mg/L	13	15	

Analyst: TFB Date: 09/28/09 Reviewer: EAH Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869390814024 File : 271a024 Time : 28-SEP-2009 23:24
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	27636	1000	1143	mg/L	14	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31863	50.00	56.72	mg/L	13	15	

JDG 09/29/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/29/09 Reviewer: TFB Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869390814025 File : 271a025 Time : 28-SEP-2009 23:52
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	19681	500.0	543.3	mg/L	9	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31004	50.00	55.19	mg/L	10	15	

Analyst: JDG Date: 09/29/09 Reviewer: TFB Date: 09/29/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179150420

Instrument : GC17A Begun : 04/14/09 11:00
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	104a001	X	PRIMER			04/14/09 11:00	1.0		
002	104a002	IB	CALIB			04/14/09 11:27	1.0		
003	104a003	ICAL	HEXOTP_5			04/14/09 11:55	1.0	1	
004	104a004	ICAL	HEXOTP_10			04/14/09 12:22	1.0	2	
005	104a005	ICAL	HEXOTP_25			04/14/09 12:50	1.0	3	
006	104a006	ICAL	HEXOTP_50			04/14/09 13:17	1.0	4	
007	104a007	ICAL	HEXOTP_100			04/14/09 13:45	1.0	5	
008	104a008	ICAL	HEXOTP_200			04/14/09 14:12	1.0	6	
009	104a009	IB	CALIB			04/14/09 14:39	1.0		
010	104a010	X	IB			04/14/09 15:10	1.0		
011	104a011	X	CMARKER			04/14/09 15:38	1.0	7	
012	104a012	CCV	DSL_250			04/14/09 16:05	1.0	8	
013	104a013	CCV	MO_500			04/14/09 16:33	1.0	9	
014	104a014	CCV	HEXOTP_50			04/14/09 17:01	1.0	10	
015	104a015	CCV	MO_500			04/14/09 17:45	1.0	9	
016	104a016	X	IB			04/14/09 18:20	1.0		
017	104a017	X	IB			04/14/09 18:47	1.0		
018	104a018	X	IB			04/14/09 19:14	1.0		
019	104a019	IB	CALIB			04/14/09 19:42	1.0		
020	104a020	ICAL	DSL_10			04/14/09 20:09	1.0	11	
021	104a021	ICAL	DSL_100			04/14/09 20:37	1.0	12	
022	104a022	ICAL	DSL_500			04/14/09 21:04	1.0	13	
023	104a023	ICAL	DSL_1000			04/14/09 21:32	1.0	14	
024	104a024	ICAL	DSL_5000			04/14/09 22:00	1.0	13	
025	104a025	ICAL	DSL_7500			04/14/09 22:27	1.0	15	
026	104a026	IB	CALIB			04/14/09 22:55	1.0		
027	104a027	ICV	DSL_500			04/14/09 23:23	1.0	16	
028	104a028	X	ICV			04/14/09 23:50	1.0	16	
029	104a029	IB	CALIB			04/15/09 00:18	1.0		
030	104a030	ICAL	MO_50			04/15/09 00:45	1.0	17	
031	104a031	ICAL	MO_250			04/15/09 01:12	1.0	18	
032	104a032	ICAL	MO_500			04/15/09 01:40	1.0	19	
033	104a033	ICAL	MO_1000			04/15/09 02:07	1.0	20	
034	104a034	ICAL	MO_5000			04/15/09 02:34	1.0	21	
035	104a035	ICAL	MO_7500			04/15/09 03:02	1.0	22	
036	104a036	X	IB			04/15/09 03:29	1.0		
037	104a037	CMARKER	C8-C50			04/15/09 03:57	1.0	7	
038	104a038	X	IB			04/15/09 04:24	1.0		

DNT 04/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 04/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 38.

Analyst: DNT Date: 04/14/09 Reviewer: CP Date: 04/14/09

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11248 8=S11497 9=S11856 10=S11709 11=S10988 12=S10989 13=S10987 14=S10991 15=S10992 16=S11498 17=S11818 18=S11813 19=S11814 20=S11815 21=S11816 22=S11817

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179253466

Instrument : GC17A Begun : 06/24/09 20:19
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	176a001	X	PRIMER				06/24/09 20:19	1.0		
002	176a002	IB	CALIB				06/24/09 20:46	1.0		
003	176a003	ICAL	HEXOTP_5				06/24/09 21:13	1.0	1	
004	176a004	ICAL	HEXOTP_10				06/24/09 21:41	1.0	2	
005	176a005	ICAL	HEXOTP_25				06/24/09 22:09	1.0	3	
006	176a006	ICAL	HEXOTP_50				06/24/09 22:36	1.0	4	
007	176a007	ICAL	HEXOTP_100				06/24/09 23:04	1.0	5	
008	176a008	X	ICAL				06/24/09 23:31	1.0	6	
010	176a010	X	CMARKER				06/25/09 00:26	1.0	7	
011	176a011	X	IB				06/25/09 00:54	1.0		
012	176a012	X	IB				06/25/09 01:22	1.0		
013	176a013	CCV	DSL_250				06/25/09 01:49	1.0	8	
014	176a014	CCV	MO_500				06/25/09 02:17	1.0	9	
015	176a015	X	CCV				06/25/09 02:44	1.0	8	
016	176a016	X	CCV				06/25/09 03:12	1.0	9	
017	176a017	BLANK	QC501324	S	Soil	152313	06/25/09 03:39	1.0		
018	176a018	LCS	QC501325	S	Soil	152313	06/25/09 04:07	1.0		
019	176a019	BLANK	QC500990	S	Water	152234	06/25/09 04:35	1.0		
020	176a020	BS	QC500991	S	Water	152234	06/25/09 05:02	1.0		
021	176a021	BSD	QC500992	S	Water	152234	06/25/09 05:30	1.0		
022	176a022	PREPBLK	QC500993	S	WET DI Leachate	152234	06/25/09 05:57	1.0		
023	176a023	SAMPLE	212960-007	S	Soil	152313	06/25/09 06:25	1.0		
024	176a024	SAMPLE	212960-005	S	Soil	152313	06/25/09 06:52	1.0		
025	176a025	SAMPLE	212908-021	S	WET DI Leachate	152234	06/25/09 07:19	1.0		
026	176a026	SAMPLE	212908-019	S	Soil	152225	06/25/09 07:47	3.0		2:BUNKC:12-40=10000
027	176a027	X	DSL_500				06/25/09 08:15	1.0	10	
028	176a028	CCV	MO_500				06/25/09 08:42	1.0	9	
029	176a029	CCV	DSL_500				06/25/09 09:26	1.0	10	
030	176a030	X	IB				06/25/09 11:53	1.0		
031	176a031	CMARKER	C8-C50				06/25/09 12:20	1.0	7	
032	176a032	CCV	DSL_250				06/25/09 12:47	1.0	8	
033	176a033	CCV	MO_500				06/25/09 13:15	1.0	9	
034	176a034	BLANK	QC501461		Soil	152351	06/25/09 13:48	1.0		
035	176a035	LCS	QC501462		Soil	152351	06/25/09 14:16	1.0		
036	176a036	LCS	QC501512		Soil	152351	06/25/09 14:43	1.0		
037	176a037	CCV	DSL_500				06/25/09 15:25	1.0	10	
038	176a038	CCV	MO_500				06/25/09 15:52	1.0	9	
039	176a039	SAMPLE	213066-001	S	Soil	152313	06/25/09 16:36	10.0		
040	176a040	SAMPLE	213066-002	S	Soil	152313	06/25/09 17:03	10.0		
041	176a041	SAMPLE	213066-003	S	Soil	152313	06/25/09 17:31	10.0		
042	176a042	SAMPLE	213066-004	S	Soil	152313	06/25/09 17:58	10.0		
043	176a043	SAMPLE	213066-005	S	Soil	152313	06/25/09 18:25	5.0		
044	176a044	SAMPLE	213066-006	S	Soil	152313	06/25/09 18:52	5.0		
045	176a045	SAMPLE	213067-001	S	Soil	152313	06/25/09 19:20	10.0		
046	176a046	BLANK	QC501324	S	Soil	152313	06/25/09 19:47	1.0		
047	176a047	LCS	QC501325	S	Soil	152313	06/25/09 20:15	1.0		
048	176a048	BLANK	QC501324		Soil	152313	06/25/09 20:42	1.0		
049	176a049	X	CMARKER				06/25/09 21:10	1.0	7	
050	176a050	CCV	DSL_1000				06/25/09 21:37	1.0	11	
051	176a051	CCV	MO_500				06/25/09 22:05	1.0	9	
052	176a052	X	CCV				06/25/09 22:32	1.0	11	
053	176a053	X	CCV				06/25/09 22:59	1.0	9	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179253466

Instrument : GC17A Begun : 06/24/09 20:19
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
054	176a054	MSS	212960-003	S	Soil	152313	06/25/09 23:26	1.0		2:BUNKC:12-50=5200
055	176a055	MS	QC501326	S	Soil	152313	06/25/09 23:54	1.0		
056	176a056	MSD	QC501327	S	Soil	152313	06/26/09 00:21	1.0		
057	176a057	SAMPLE	212960-006	S	Soil	152313	06/26/09 00:49	5.0		
058	176a058	SAMPLE	212960-001	S	Soil	152313	06/26/09 01:16	1.0		
059	176a059	SAMPLE	212960-002	S	Soil	152313	06/26/09 01:44	1.0		
060	176a060	SAMPLE	212944-002	S	Soil	152264	06/26/09 02:11	10.0		
061	176a061	X	IB				06/26/09 02:39	1.0		
062	176a062	SAMPLE	212960-005	S	Soil	152313	06/26/09 03:07	1.0		
063	176a063	SAMPLE	212960-007	S	Soil	152313	06/26/09 03:34	1.0		
064	176a064	SAMPLE	212960-004	S	Soil	152313	06/26/09 04:02	1.0		
065	176a065	CCV	DSL_250				06/26/09 04:30	1.0	8	
066	176a066	CCV	MO_500				06/26/09 04:57	1.0	9	
067	176a067	X	CCV				06/26/09 05:25	1.0	8	
068	176a068	X	CCV				06/26/09 05:53	1.0	9	

JDG 06/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

JDG 06/26/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 68.

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11825 8=S12018 9=S12265 10=S12164 11=S12019

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179344632

Instrument : GC17A Begun : 08/27/09 07:52
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	239a001	X	IB			08/27/09 07:52	1.0		
002	239a002	X	CMARKER			08/27/09 08:20	1.0	1	
003	239a003	X	CCV			08/27/09 08:47	1.0	2	
004	239a004	X	CCV			08/27/09 09:14	1.0	3	
005	239a005	X	CMARKER			08/27/09 09:47	1.0	1	
006	239a006	X	IB			08/27/09 12:35	1.0		
007	239a007	X	CMARKER			08/27/09 13:02	1.0	1	
008	239a008	CCV	DSL_500			08/27/09 13:30	1.0	2	
009	239a009	CCV	MO_500			08/27/09 13:57	1.0	3	
010	239a010	CCV	DSL_500			08/27/09 14:47	1.0	2	
011	239a011	CCV	MO_500			08/27/09 15:15	1.0	3	
012	239a012	X	TANKCHECK			08/27/09 18:49	1.0		
013	239a013	X	TANKCHECK			08/27/09 19:16	1.0		
014	239a014	IB	CLEAN			08/27/09 19:44	1.0		
015	239a015	X	IB			08/28/09 14:09	1.0		
016	239a016	X	CMARKER			08/28/09 14:36	1.0	1	
017	239a017	CCV	DSL_500			08/28/09 15:04	1.0	2	
018	239a018	CCV	MO_500			08/28/09 15:31	1.0	3	
019	239a019	CCV	MO_500			08/28/09 16:11	1.0	3	
020	239a020	X	IB			08/28/09 18:51	1.0		
021	239a021	X	IB			08/28/09 19:19	1.0		
022	239a022	IB	CALIB			08/28/09 19:47	1.0		
023	239a023	ICAL	MO_50			08/28/09 20:14	1.0	4	
024	239a024	ICAL	MO_250			08/28/09 20:42	1.0	5	
025	239a025	ICAL	MO_500			08/28/09 21:09	1.0	6	
026	239a026	ICAL	MO_1000			08/28/09 21:36	1.0	7	
027	239a027	ICAL	MO_5000			08/28/09 22:04	1.0	8	
028	239a028	ICAL	MO_7500			08/28/09 22:31	1.0	9	
029	239a029	IB	CALIB			08/28/09 22:58	1.0		
030	239a030	CMARKER	C8C-50			08/28/09 23:26	1.0	1	
031	239a031	IB	CALIB			08/28/09 23:53	1.0		

DNT 08/31/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: DNT Date: 08/31/09 Reviewer: CP Date: 08/31/09

Standards used: 1=S11825 2=S12546 3=S12462 4=S12675 5=S12676 6=S12677 7=S12678 8=S12679 9=S12680

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179390704

Instrument : GC17A Begun : 09/28/09 07:44
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	271a001	X	PRIMER				09/28/09 07:44	1.0		
002	271a002	X	IB				09/28/09 08:11	1.0		
003	271a003	X	CMARKER				09/28/09 08:39	1.0	1	
004	271a004	CCV	DSL_500				09/28/09 09:06	1.0	2	
005	271a005	CCV	MO_500				09/28/09 09:34	1.0	3	
006	271a006	CCV	KERO_250				09/28/09 12:56	1.0	4	
007	271a007	BLANK	QC513709	S	Soil	155324	09/28/09 14:55	1.0		
008	271a008	SAMPLE	215160-003	S	Soil	155324	09/28/09 15:22	1.0		
009	271a009	SAMPLE	215160-001	S	Soil	155324	09/28/09 15:49	1.0		2:BUNKC:12-40=10000
010	271a010	SAMPLE	215160-002	S	Soil	155324	09/28/09 16:17	2.0		2:BUNKC:12-40=12000
011	271a011	X	IB				09/28/09 16:44	1.0		
012	271a012	SAMPLE	215064-004		Water	155240	09/28/09 18:11	1.0		
013	271a013	SAMPLE	215064-006		Water	155240	09/28/09 18:38	1.0		
014	271a014	SAMPLE	215064-007		Water	155240	09/28/09 19:05	1.0		
015	271a015	SAMPLE	215072-007		Water	155240	09/28/09 19:32	1.0		
016	271a016	SAMPLE	215072-008		Water	155240	09/28/09 20:00	1.0		
017	271a017	SAMPLE	215072-009		Water	155240	09/28/09 20:27	1.0		
018	271a018	CCV	DSL_250				09/28/09 20:54	1.0	5	
019	271a019	CCV	MO_500				09/28/09 21:21	1.0	3	
020	271a020	CCV	KERO_250				09/28/09 21:48	1.0	4	
021	271a021	CCV	BUNK_500				09/28/09 22:16	1.0	6	
022	271a022	X	CCV				09/28/09 22:43	1.0	5	
023	271a023	X	CCV				09/28/09 23:11	1.0	3	
024	271a024	X	CCV				09/28/09 23:38	1.0	4	
025	271a025	X	CCV				09/29/09 00:05	1.0	6	
026	271a026	LCS	QC513963	S	Soil	155381	09/29/09 00:32	1.0		
027	271a027	SAMPLE	215191-010	S	Soil	155381	09/29/09 00:59	3.0		
028	271a028	SAMPLE	215191-001	S	Soil	155381	09/29/09 01:26	3.0		2:BUNKC:12-40=11000
029	271a029	MS	QC513964	S	Soil	155381	09/29/09 01:54	10.0		2:BUNKC:12-40=6400
030	271a030	MSD	QC513965	S	Soil	155381	09/29/09 02:21	10.0		2:BUNKC:12-40=6700
031	271a031	X	IB				09/29/09 02:48	1.0		
032	271a032	LCS	QC513962	S	Soil	155381	09/29/09 03:16	1.0		
033	271a033	X	CMARKER				09/29/09 03:43	1.0	1	
034	271a034	CCV	DSL_1000				09/29/09 04:11	1.0	7	
035	271a035	CCV	MO_500				09/29/09 04:38	1.0	3	
036	271a036	CCV	BUNK_500				09/29/09 05:05	1.0	6	
037	271a037	X	CCV				09/29/09 05:33	1.0	7	
038	271a038	X	CCV				09/29/09 06:00	1.0	3	
039	271a039	X	CCV				09/29/09 06:28	1.0	6	

JDG 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S11825 2=S12546 3=S12822 4=S12884 5=S12545 6=S12582 7=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813 12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895 23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869390814

Instrument : GC26A Begun : 09/28/09 09:34
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
002	271a002	X	IB				09/28/09 09:34	1.0		
003	271a003	X	IB				09/28/09 10:02	1.0		
004	271a004	X	CMARKER				09/28/09 10:31	1.0	1	
005	271a005	CCV	DSL_1000				09/28/09 10:59	1.0	2	
006	271a006	CCV	MO_500				09/28/09 11:28	1.0	3	
007	271a007	SAMPLE	215095-003	S	Soil	155343	09/28/09 12:29	1.0		
008	271a008	MSD	QC513800	S	Soil	155343	09/28/09 12:57	3.0		2:BUNKC:12-50=6700
009	271a009	MS	QC513799	S	Soil	155343	09/28/09 13:25	3.0		
010	271a010	CCV	DSL_500				09/28/09 14:37	1.0	4	
011	271a011	CCV	MO_500				09/28/09 15:05	1.0	3	
012	271a012	CCV	JP5_250				09/28/09 16:20	1.0	5	
013	271a013	BLANK	QC513380	S	Water	155240	09/28/09 18:13	1.0		
014	271a014	BLANK	QC513380		Water	155240	09/28/09 18:41	1.0		
015	271a015	LCS	QC513381	S	Water	155240	09/28/09 19:10	1.0		
016	271a016	LCS	QC513384		Water	155240	09/28/09 19:38	1.0		
017	271a017	MSS	215064-005		Water	155240	09/28/09 20:06	1.0		
018	271a018	MS	QC513382		Water	155240	09/28/09 20:34	1.0		
019	271a019	MSD	QC513383		Water	155240	09/28/09 21:02	1.0		
020	271a020	SAMPLE	215015-007	S	Water	155240	09/28/09 21:30	1.0		
021	271a021	SAMPLE	215015-008	S	Water	155240	09/28/09 21:59	1.0		
022	271a022	SAMPLE	215015-010	S	Water	155240	09/28/09 22:27	1.0		
023	271a023	X	CMARKER				09/28/09 22:55	1.0	1	
024	271a024	CCV	DSL_1000				09/28/09 23:24	1.0	2	
025	271a025	CCV	MO_500				09/28/09 23:52	1.0	3	
026	271a026	CCV	JP5_250				09/29/09 00:20	1.0	5	
027	271a027	X	CCV				09/29/09 00:48	1.0	2	
028	271a028	X	CCV				09/29/09 01:17	1.0	3	
029	271a029	X	CCV				09/29/09 01:45	1.0	5	
030	271a030	SAMPLE	215015-011	S	Water	155240	09/29/09 02:13	1.0		
031	271a031	SAMPLE	215015-012	S	Water	155240	09/29/09 02:41	1.0		
032	271a032	SAMPLE	215015-013	S	Water	155240	09/29/09 03:10	1.0		
033	271a033	SAMPLE	215015-014	S	Water	155240	09/29/09 03:38	1.0		
034	271a034	BLANK	QC513591	S	Water	155293	09/29/09 04:06	1.0		
035	271a035	SAMPLE	215015-015	S	Water	155293	09/29/09 04:34	1.0		
036	271a036	SAMPLE	215015-016	S	Water	155293	09/29/09 05:03	1.0		
037	271a037	SAMPLE	215126-001	S	Water	155293	09/29/09 05:31	1.0		
038	271a038	SAMPLE	215126-002	S	Water	155293	09/29/09 06:00	1.0		
039	271a039	SAMPLE	215126-003	S	Water	155293	09/29/09 06:28	1.0		
040	271a040	CCV	DSL_250				09/29/09 06:56	1.0	6	
041	271a041	CCV	MO_500				09/29/09 07:24	1.0	3	
042	271a042	CCV	JP5_250				09/29/09 07:53	1.0	5	
043	271a043	SAMPLE	215126-004	S	Water	155293	09/29/09 09:57	1.0		
044	271a044	SAMPLE	215126-005	S	Water	155293	09/29/09 10:25	1.0		
045	271a045	X	CMARKER				09/29/09 12:05	1.0	1	
046	271a046	CCV	DSL_1000				09/29/09 12:33	1.0	2	
047	271a047	CCV	MO_500				09/29/09 13:01	1.0	3	
048	271a048	CCV	JP5_250				09/29/09 13:30	1.0	5	

JDG 09/28/09 : #1 (IB) did not run.

TFB 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 2 through 11.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869390814

Instrument : GC26A Begun : 09/28/09 09:34
Method : EPA 8015B SOP Version : TEH_rv13

JDG 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 12 through 42.

TFB 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 43 through 48.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12546 5=S12969 6=S12545

SAMPLE PREPARATION SUMMARY

Batch # : 155240
Started By : CRD
Method : 3520C
Spike #1 ID : S12934

Prep Date : 23-SEP-2009 18:50
SOP Version : TEH_3520_rv12
Spike #2 ID : S12290

Analysis : TEH
Finished By : KKM
Units : mL
Spike #3 ID : S12972

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215015-007		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-008		Water	500	2.5	1	0.005	5	.5			3630C	TEH	
215015-010		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-011		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-012		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-013		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-014		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215058-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215064-004		Water	500	2.5	1	0.005	7	.5				TEHM	
215064-005		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
215064-006		Water	500	2.5	1	0.005	7	.5				TEHM	
215064-007		Water	500	2.5	1	0.005	7	.5				TEHM	
215072-007		Water	500	2.5	1	0.005	7	.5				TEHM	
215072-008		Water	500	2.5	1	0.005	7	.5				TEHM	
215072-009		Water	500	2.5	1	0.005	5	.5				TEHM	
215075-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC513380	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC513381	LCS	Water	500	2.5	1	0.005		.5		.5	3630C		
QC513382	MS	Water	500	2.5	1	0.005	7	.5		.5			
QC513383	MSD	Water	500	2.5	1	0.005	7	.5		.5			
QC513384	LCS	Water	500	2.5	1	0.005		.5	.5				

Analyst: TFB Date: 09/29/09 Reviewer: JDG Date: 09/29/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

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LIMS Batch No: 155240
LIMS Analysis: TEH
Date Extracted: 9/23/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☑ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
215015-007	H	500	7	2.5	X	
8	D		5			
10	H		7			
11						
12						
13						
14						
215058-001	H					
4	G					
5	F					
8	J					
9						
215064-004	D					
5	K					MSS
6	D		5			
7			7			
215072-007						
8						
9			5			
215075-001	B		7		X	
MB QC513380						
LCS 1						
MS 2	J		7			
MSD 3						
LCS 4						MO

0.5 mL of TEH_SURR was added to all samples
0.5*/0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2
Extraction Start Time:
Extraction End Time:
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to final volume at temperature (degrees C)
Relinquished to TEH Department

Mfg & Lot# / LIMS # / Time	Date/ Initials
S129340	SL for CRD 9/23/09
S122900*/S129122A	
F509 3334	
EMF 9/18	
1900	
1310	KKM 9/24/09
NA	KKM 9/28/09
EUB4900790A	
100	
✓	

SL for CRD 9/23/09
Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

TEB 9/28/09
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KKM
Cleanup Date: 9/28/09

Benchbook # **BK 2939**
Page 25

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
215015 · C07	155240	1.0	1.0	
C08				
C10				
C11				
C12				
C13				
C14				
215058 · C01				
C04				
C05				
C08				
C09				
215075 · C01				
MBG051338O				
LCS 1				

TFB 9/28/09

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	KKM 9/28/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11916	
Extracts were eluted with 4.0 mL CH_2Cl_2	EMB492205	
Concentrated to volumes as noted above		

KKM 9/28/09
Extraction Chemist / Date

Continued from page ____
Continued on page ____

TFB 9/28/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: NAV
Cleanup Date: 9/29/09

Benchbook # **BK 2939**
Page 29

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
215082-011	155438	1.0	1.0	
215167-001				
215236-001				
-002				
-003				
-004				
-005				
-006				
MB QC514196				
LCS Bank 7				
LCS MO514227 TFB 9/29/09				
215143 -001	155394	1.0	1.0	
215145 -006				
MB QC514017				
LCS 8				
MS 9				
MSD 20				
215058 -008	155240	0.5	0.5 ~~1.0~~ NAV 9/29/09	RE-56
215218 -015	155438	1.0	1.0	
-016				
-017				

TFB 9/29/09

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	N/A	NAV 9/29/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11910	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM49205	
Concentrated to volumes as noted above	✓	

Continued from page ___
Continued on page ___

Extraction Chemist / Date 9/29/09

TFB 9/29/09
Reviewed by / Date

Laboratory Job Number 215064

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091709B	Batch#:	155470
Lab ID:	215064-001	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091709B	Batch#:	155470
Lab ID:	215064-001	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	88	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-41B-9C1	Batch#:	155470
Lab ID:	215064-002	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	95	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	1.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-41B-9C1	Batch#:	155470
Lab ID:	215064-002	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	89	83-125	
Bromofluorobenzene	96	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-40B-9C1	Batch#:	155470
Lab ID:	215064-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	2.3	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	97	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	11	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	3.1	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	3.8	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-40B-9C1	Batch#:	155470
Lab ID:	215064-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	114	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	88	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-105A-9C1	Diln Fac:	1.000
Lab ID:	215064-004	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	155528	10/01/09	
Chloromethane	ND	1.0	155528	10/01/09	
Vinyl Chloride	1.0	0.5	155528	10/01/09	
Bromomethane	ND	1.0	155528	10/01/09	
Chloroethane	2.3	1.0	155470	09/30/09	
Trichlorofluoromethane	ND	1.0	155528	10/01/09	
Iodomethane	ND	10	155528	10/01/09	L2
Acetone	ND	10	155528	10/01/09	
1,1-Dichloroethene	ND	0.5	155528	10/01/09	
Methylene Chloride	ND	10	155528	10/01/09	
Carbon Disulfide	ND	0.5	155528	10/01/09	
MTBE	56	0.5	155528	10/01/09	
trans-1,2-Dichloroethene	ND	0.5	155528	10/01/09	
Vinyl Acetate	ND	10	155528	10/01/09	
1,1-Dichloroethane	13	0.5	155528	10/01/09	
2-Butanone	ND	10	155528	10/01/09	
cis-1,2-Dichloroethene	ND	0.5	155528	10/01/09	
2,2-Dichloropropane	ND	0.5	155528	10/01/09	
Chloroform	ND	0.5	155528	10/01/09	
Bromochloromethane	ND	0.5	155528	10/01/09	
1,1,1-Trichloroethane	ND	0.5	155528	10/01/09	
1,1-Dichloropropene	ND	0.5	155528	10/01/09	
Carbon Tetrachloride	ND	0.5	155528	10/01/09	
1,2-Dichloroethane	ND	0.5	155528	10/01/09	
Benzene	64	0.5	155528	10/01/09	
Trichloroethene	ND	0.5	155528	10/01/09	
1,2-Dichloropropane	ND	0.5	155528	10/01/09	
Bromodichloromethane	ND	0.5	155528	10/01/09	
Dibromomethane	ND	0.5	155528	10/01/09	
4-Methyl-2-Pentanone	ND	10	155528	10/01/09	
cis-1,3-Dichloropropene	ND	0.5	155528	10/01/09	
Toluene	ND	0.5	155528	10/01/09	
trans-1,3-Dichloropropene	ND	0.5	155528	10/01/09	
1,1,2-Trichloroethane	ND	0.5	155528	10/01/09	
2-Hexanone	ND	10	155528	10/01/09	
1,3-Dichloropropane	ND	0.5	155528	10/01/09	
Tetrachloroethene	ND	0.5	155528	10/01/09	
Dibromochloromethane	ND	0.5	155528	10/01/09	
1,2-Dibromoethane	ND	0.5	155528	10/01/09	
Chlorobenzene	ND	0.5	155528	10/01/09	
1,1,1,2-Tetrachloroethane	ND	0.5	155528	10/01/09	
Ethylbenzene	ND	0.5	155528	10/01/09	
m,p-Xylenes	ND	0.5	155528	10/01/09	
o-Xylene	ND	0.5	155528	10/01/09	
Styrene	ND	0.5	155528	10/01/09	
Bromoform	ND	1.0	155528	10/01/09	
Isopropylbenzene	15	0.5	155528	10/01/09	
1,1,2,2-Tetrachloroethane	ND	0.5	155528	10/01/09	
1,2,3-Trichloropropane	ND	0.5	155528	10/01/09	
Propylbenzene	11	0.5	155528	10/01/09	
Bromobenzene	ND	0.5	155528	10/01/09	
1,3,5-Trimethylbenzene	ND	0.5	155528	10/01/09	
2-Chlorotoluene	ND	0.5	155528	10/01/09	
4-Chlorotoluene	ND	0.5	155528	10/01/09	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-105A-9C1	Diln Fac:	1.000
Lab ID:	215064-004	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
tert-Butylbenzene	0.8	0.5	155528	10/01/09	
1,2,4-Trimethylbenzene	ND	0.5	155528	10/01/09	
sec-Butylbenzene	5.4	0.5	155528	10/01/09	
para-Isopropyl Toluene	ND	0.5	155528	10/01/09	
1,3-Dichlorobenzene	ND	0.5	155528	10/01/09	
1,4-Dichlorobenzene	ND	0.5	155528	10/01/09	
n-Butylbenzene	5.6	0.5	155528	10/01/09	
1,2-Dichlorobenzene	ND	0.5	155528	10/01/09	
1,2-Dibromo-3-Chloropropane	ND	2.0	155528	10/01/09	
1,2,4-Trichlorobenzene	ND	0.5	155528	10/01/09	
Hexachlorobutadiene	ND	2.0	155528	10/01/09	
Naphthalene	19	2.0	155528	10/01/09	
1,2,3-Trichlorobenzene	ND	0.5	155528	10/01/09	
Xylene (total)	ND	0.5	155528	10/01/09	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	114	77-120	155470	09/30/09	
Dibromofluoromethane	103	77-120	155528	10/01/09	
1,2-Dichloroethane-d4	113	70-127	155470	09/30/09	
1,2-Dichloroethane-d4	105	70-127	155528	10/01/09	
Toluene-d8	88	83-125	155470	09/30/09	
Toluene-d8	104	83-125	155528	10/01/09	
Bromofluorobenzene	121 *	78-120	155470	09/30/09	S1
Bromofluorobenzene	105	78-120	155528	10/01/09	

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Diln Fac:	1.000
Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	155470	09/30/09	
Chloromethane	ND	1.0	155470	09/30/09	
Vinyl Chloride	1.8	0.5	155470	09/30/09	
Bromomethane	ND	1.0	155470	09/30/09	V1
Chloroethane	2.3	1.0	155470	09/30/09	
Trichlorofluoromethane	ND	1.0	155470	09/30/09	
Iodomethane	ND	10	155470	09/30/09	L1 V1
Acetone	ND	10	155470	09/30/09	
1,1-Dichloroethene	5.5	0.5	155470	09/30/09	
Methylene Chloride	ND	10	155470	09/30/09	
Carbon Disulfide	ND	0.5	155470	09/30/09	
MTBE	60	0.5	155470	09/30/09	
trans-1,2-Dichloroethene	ND	0.5	155470	09/30/09	L1 M1 V1
Vinyl Acetate	ND	10	155470	09/30/09	
1,1-Dichloroethane	18	0.5	155470	09/30/09	
2-Butanone	ND	10	155470	09/30/09	
cis-1,2-Dichloroethene	1.0	0.5	155470	09/30/09	
2,2-Dichloropropane	ND	0.5	155470	09/30/09	
Chloroform	ND	0.5	155470	09/30/09	
Bromochloromethane	ND	0.5	155470	09/30/09	M1
1,1,1-Trichloroethane	4.5	0.5	155470	09/30/09	M1
1,1-Dichloropropene	ND	0.5	155470	09/30/09	
Carbon Tetrachloride	ND	0.5	155470	09/30/09	M1
1,2-Dichloroethane	ND	0.5	155470	09/30/09	
Benzene	49	0.5	155470	09/30/09	M2
Trichloroethene	3.2	0.5	155470	09/30/09	
1,2-Dichloropropane	ND	0.5	155470	09/30/09	
Bromodichloromethane	ND	0.5	155470	09/30/09	
Dibromomethane	ND	0.5	155470	09/30/09	
4-Methyl-2-Pentanone	ND	10	155470	09/30/09	
cis-1,3-Dichloropropene	ND	0.5	155470	09/30/09	
Toluene	ND	0.5	155470	09/30/09	
trans-1,3-Dichloropropene	ND	0.5	155470	09/30/09	
1,1,2-Trichloroethane	ND	0.5	155470	09/30/09	
2-Hexanone	ND	10	155470	09/30/09	
1,3-Dichloropropane	ND	0.5	155470	09/30/09	
Tetrachloroethene	ND	0.5	155470	09/30/09	
Dibromochloromethane	ND	0.5	155470	09/30/09	
1,2-Dibromoethane	ND	0.5	155470	09/30/09	
Chlorobenzene	ND	0.5	155470	09/30/09	
1,1,1,2-Tetrachloroethane	ND	0.5	155470	09/30/09	
Ethylbenzene	ND	0.5	155470	09/30/09	
m,p-Xylenes	ND	0.5	155470	09/30/09	
o-Xylene	ND	0.5	155470	09/30/09	
Styrene	ND	0.5	155470	09/30/09	
Bromoform	ND	1.0	155470	09/30/09	
Isopropylbenzene	10	0.5	155470	09/30/09	
1,1,2,2-Tetrachloroethane	ND	0.5	155470	09/30/09	
1,2,3-Trichloropropane	ND	0.5	155470	09/30/09	
Propylbenzene	6.8	0.5	155470	09/30/09	
Bromobenzene	ND	0.5	155470	09/30/09	
1,3,5-Trimethylbenzene	ND	0.5	155470	09/30/09	
2-Chlorotoluene	ND	0.5	155470	09/30/09	
4-Chlorotoluene	ND	0.5	155470	09/30/09	
tert-Butylbenzene	ND	0.5	155470	09/30/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Diln Fac:	1.000
Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	ND	0.5	155470	09/30/09	
sec-Butylbenzene	3.0	0.5	155470	09/30/09	M2
para-Isopropyl Toluene	ND	0.5	155470	09/30/09	
1,3-Dichlorobenzene	ND	0.5	155470	09/30/09	
1,4-Dichlorobenzene	ND	0.5	155470	09/30/09	
n-Butylbenzene	5.6	0.5	155528	10/01/09	
1,2-Dichlorobenzene	ND	0.5	155470	09/30/09	
1,2-Dibromo-3-Chloropropane	ND	2.0	155470	09/30/09	
1,2,4-Trichlorobenzene	ND	0.5	155470	09/30/09	V1
Hexachlorobutadiene	ND	2.0	155470	09/30/09	
Naphthalene	18	2.0	155528	10/01/09	
1,2,3-Trichlorobenzene	ND	0.5	155470	09/30/09	L1 V1
Xylene (total)	ND	0.5	155470	09/30/09	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	108	77-120	155470	09/30/09	
Dibromofluoromethane	101	77-120	155528	10/01/09	
1,2-Dichloroethane-d4	104	70-127	155470	09/30/09	
1,2-Dichloroethane-d4	103	70-127	155528	10/01/09	
Toluene-d8	87	83-125	155470	09/30/09	
Toluene-d8	103	83-125	155528	10/01/09	
Bromofluorobenzene	117	78-120	155470	09/30/09	
Bromofluorobenzene	104	78-120	155528	10/01/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-529-9C1	Batch#:	155470
Lab ID:	215064-006	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	72	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-529-9C1	Batch#:	155470
Lab ID:	215064-006	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	88	83-125	
Bromofluorobenzene	96	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-62A-9C1	Batch#:	155470
Lab ID:	215064-007	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	2.0	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	10	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	13	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.0	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-62A-9C1	Batch#:	155470
Lab ID:	215064-007	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	88	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-47B-9C1	Batch#:	155470
Lab ID:	215064-008	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	1.4	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	30	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	7.7	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	27	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	0.5	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	75	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.5	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-47B-9C1	Batch#:	155470
Lab ID:	215064-008	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	88	83-125	
Bromofluorobenzene	95	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-26A-9C1	Batch#:	155470
Lab ID:	215064-009	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	2.7	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-26A-9C1	Batch#:	155470
Lab ID:	215064-009	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	88	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514336	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	29.42	118	56-140	
Chloromethane	25.00	29.16	117	46-142	
Vinyl Chloride	25.00	28.95	116	49-136	
Bromomethane	25.00	32.06 b	128	42-154	V3
Chloroethane	25.00	21.65	87	51-133	
Trichlorofluoromethane	25.00	27.41	110	63-135	
Iodomethane	25.00	41.07 b	164 *	70-130	L1 V3
Acetone	25.00	29.16	117	48-130	
1,1-Dichloroethene	25.00	29.31	117	68-133	
Methylene Chloride	25.00	28.00	112	71-120	
Carbon Disulfide	25.00	26.72	107	56-120	
MTBE	25.00	27.01	108	58-120	
trans-1,2-Dichloroethene	25.00	30.53 b	122 *	80-120	L1 V3
Vinyl Acetate	25.00	24.91	100	63-124	
1,1-Dichloroethane	25.00	27.10	108	77-120	
2-Butanone	25.00	27.95	112	57-120	
cis-1,2-Dichloroethene	25.00	28.75	115	75-120	
2,2-Dichloropropane	25.00	28.51	114	72-128	
Chloroform	25.00	26.99	108	78-120	
Bromochloromethane	25.00	30.02	120	78-120	
1,1,1-Trichloroethane	25.00	29.36	117	78-120	
1,1-Dichloropropene	25.00	26.74	107	75-120	
Carbon Tetrachloride	25.00	27.30	109	80-120	
1,2-Dichloroethane	25.00	25.00	100	74-120	
Benzene	25.00	26.86	107	77-120	
Trichloroethene	25.00	29.09	116	78-122	
1,2-Dichloropropane	25.00	25.90	104	76-120	
Bromodichloromethane	25.00	28.36	113	78-120	
Dibromomethane	25.00	27.85	111	77-120	
4-Methyl-2-Pentanone	25.00	24.13	97	65-120	
cis-1,3-Dichloropropene	25.00	29.12	116	76-120	
Toluene	25.00	24.03	96	73-120	
trans-1,3-Dichloropropene	25.00	21.85	87	72-120	
1,1,2-Trichloroethane	25.00	23.67	95	76-120	
2-Hexanone	25.00	22.10	88	57-121	
1,3-Dichloropropane	25.00	23.33	93	75-120	
Tetrachloroethene	25.00	24.97	100	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514336	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	25.31	101	76-120	
1,2-Dibromoethane	25.00	24.66	99	77-120	
Chlorobenzene	25.00	23.94	96	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.61	98	77-120	
Ethylbenzene	25.00	24.57	98	78-120	
m,p-Xylenes	50.00	47.29	95	77-120	
o-Xylene	25.00	23.01	92	77-120	
Styrene	25.00	24.02	96	77-120	
Bromoform	25.00	23.05	92	74-121	
Isopropylbenzene	25.00	23.44	94	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.36	101	73-120	
1,2,3-Trichloropropane	25.00	27.85	111	72-120	
Propylbenzene	25.00	22.42	90	76-120	
Bromobenzene	25.00	28.74	115	75-120	
1,3,5-Trimethylbenzene	25.00	28.44	114	77-120	
2-Chlorotoluene	25.00	26.66	107	76-120	
4-Chlorotoluene	25.00	24.53	98	78-120	
tert-Butylbenzene	25.00	20.39	82	76-120	
1,2,4-Trimethylbenzene	25.00	29.74	119	77-120	
sec-Butylbenzene	25.00	20.49	82	80-120	
para-Isopropyl Toluene	25.00	25.51	102	76-120	
1,3-Dichlorobenzene	25.00	25.07	100	75-120	
1,4-Dichlorobenzene	25.00	23.95	96	77-120	
n-Butylbenzene	25.00	36.35 b	145 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.40	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.01	100	65-120	
1,2,4-Trichlorobenzene	25.00	30.19 b	121	73-121	V3
Hexachlorobutadiene	25.00	23.88	96	73-123	
Naphthalene	25.00	32.85 b	131 *	62-121	L1 V3
1,2,3-Trichlorobenzene	25.00	31.62 b	126 *	66-123	L1 V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	89	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514337	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514337	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	90	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514399

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	31.78	127	56-140	
Chloromethane	<0.2000	25.00	29.29	117	46-142	
Vinyl Chloride	1.810	25.00	30.06	113	49-136	
Bromomethane	<0.2000	25.00	25.11 b	100	42-154	V3
Chloroethane	2.309	25.00	23.74	86	51-133	
Trichlorofluoromethane	<0.2000	25.00	29.81	119	63-135	
Iodomethane	<2.000	25.00	28.99 b	116	60-140	V3
Acetone	<1.000	25.00	27.61	110	48-130	
1,1-Dichloroethene	5.472	25.00	36.43	124	68-133	
Methylene Chloride	0.2151	25.00	29.15	116	71-120	
Carbon Disulfide	<0.1000	25.00	28.20	113	56-120	
MTBE	60.19	25.00	86.99	107	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	33.05 b	132 *	80-120	M1 V3
Vinyl Acetate	<2.000	25.00	21.96	88	63-124	
1,1-Dichloroethane	18.24	25.00	45.63	110	77-120	
2-Butanone	<2.000	25.00	25.41	102	57-120	
cis-1,2-Dichloroethene	1.035	25.00	30.79	119	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.32	109	72-128	
Chloroform	0.1945	25.00	28.89	115	78-120	
Bromochloromethane	<0.1000	25.00	31.92	127 *	78-120	M1
1,1,1-Trichloroethane	4.478	25.00	36.95	130 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	27.58	110	75-120	
Carbon Tetrachloride	<0.1000	25.00	30.23	121 *	80-120	M1
1,2-Dichloroethane	<0.1000	25.00	26.24	105	74-120	
Benzene	48.53	25.00	69.86	85	77-120	
Trichloroethene	3.187	25.00	32.98	119	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.84	103	76-120	
Bromodichloromethane	<0.1000	25.00	29.14	116	78-120	
Dibromomethane	<0.1000	25.00	28.15	113	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	23.62	94	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	28.37	113	76-120	
Toluene	<0.1000	25.00	23.81	95	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	21.03	84	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	23.55	94	76-120	
2-Hexanone	<2.000	25.00	17.56	70	57-121	
1,3-Dichloropropane	<0.1000	25.00	23.26	93	75-120	
Tetrachloroethene	0.1528	25.00	25.34	101	77-120	
Dibromochloromethane	<0.1000	25.00	25.37	101	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.56	98	77-120	
Chlorobenzene	<0.1000	25.00	23.57	94	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.64	99	77-120	
Ethylbenzene	0.2945	25.00	24.86	98	78-120	
m,p-Xylenes	<0.1594	50.00	49.13	98	77-120	
o-Xylene	0.4831	25.00	24.38	96	77-120	
Styrene	<0.1000	25.00	24.58	98	77-120	
Bromoform	<0.2000	25.00	23.55	91	74-121	
Isopropylbenzene	10.22	25.00	33.28	92	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	23.83	95	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.61	106	72-120	
Propylbenzene	6.772	25.00	29.50	91	76-120	
Bromobenzene	<0.1000	25.00	27.14	109	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.13	105	77-120	
2-Chlorotoluene	<0.1000	25.00	25.92	104	76-120	
4-Chlorotoluene	<0.1000	25.00	24.23	97	78-120	
tert-Butylbenzene	0.4269	25.00	21.46	84	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.86	107	77-120	
sec-Butylbenzene	3.049	25.00	22.93	80	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.41	94	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.36	97	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	23.26	93	77-120	
n-Butylbenzene	4.694	25.00	39.97 b	141 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	24.70	99	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.21	94	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	26.84 b	107	73-121	V3
Hexachlorobutadiene	<0.4000	25.00	23.51	94	73-123	
Naphthalene	17.64	25.00	43.89 b	105	62-121	V3
1,2,3-Trichlorobenzene	<0.1149	25.00	28.56 b	114	66-123	V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	109	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC514400

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	28.18	113	56-140	12	24	
Chloromethane	25.00	28.34	113	46-142	3	24	
Vinyl Chloride	25.00	28.58	107	49-136	5	24	
Bromomethane	25.00	26.90 b	108	42-154	7	24	V3
Chloroethane	25.00	22.49	81	51-133	5	25	
Trichlorofluoromethane	25.00	26.74	107	63-135	11	20	
Iodomethane	25.00	32.94 b	132	60-140	13	30	V3
Acetone	25.00	24.46	98	48-130	12	41	
1,1-Dichloroethene	25.00	33.78	113	68-133	8	20	
Methylene Chloride	25.00	27.20	108	71-120	7	20	
Carbon Disulfide	25.00	26.02	104	56-120	8	20	
MTBE	25.00	83.06	91	58-120	5	21	
trans-1,2-Dichloroethene	25.00	29.96 b	120	80-120	10	24	V3
Vinyl Acetate	25.00	20.41	82	63-124	7	24	
1,1-Dichloroethane	25.00	41.99	95	77-120	8	20	
2-Butanone	25.00	24.15	97	57-120	5	32	
cis-1,2-Dichloroethene	25.00	29.01	112	75-120	6	20	
2,2-Dichloropropane	25.00	24.65	99	72-128	10	24	
Chloroform	25.00	26.48	105	78-120	9	20	
Bromochloromethane	25.00	30.48	121 *	78-120	5	20	M1
1,1,1-Trichloroethane	25.00	33.40	116	78-120	10	20	
1,1-Dichloropropene	25.00	26.03	104	75-120	6	21	
Carbon Tetrachloride	25.00	27.80	111	80-120	8	21	
1,2-Dichloroethane	25.00	24.17	97	74-120	8	20	
Benzene	25.00	67.27	75 *	77-120	4	20	M2
Trichloroethene	25.00	31.24	112	78-122	5	20	
1,2-Dichloropropane	25.00	24.84	99	76-120	4	20	
Bromodichloromethane	25.00	27.71	110	78-120	5	20	
Dibromomethane	25.00	27.05	108	77-120	4	20	
4-Methyl-2-Pentanone	25.00	22.91	92	65-120	3	22	
cis-1,3-Dichloropropene	25.00	27.42	110	76-120	3	20	
Toluene	25.00	22.49	90	73-120	6	20	
trans-1,3-Dichloropropene	25.00	20.04	80	72-120	5	20	
1,1,2-Trichloroethane	25.00	22.20	89	76-120	6	20	
2-Hexanone	25.00	17.52	70	57-121	0	25	
1,3-Dichloropropane	25.00	21.92	88	75-120	6	20	
Tetrachloroethene	25.00	24.12	96	77-120	5	20	
Dibromochloromethane	25.00	24.08	96	76-120	5	20	
1,2-Dibromoethane	25.00	23.65	95	77-120	4	20	
Chlorobenzene	25.00	22.56	90	78-120	4	20	
1,1,1,2-Tetrachloroethane	25.00	23.08	92	77-120	7	20	
Ethylbenzene	25.00	23.75	94	78-120	5	26	
m,p-Xylenes	50.00	47.35	95	77-120	4	20	
o-Xylene	25.00	23.72	93	77-120	3	20	
Styrene	25.00	23.96	96	77-120	3	20	
Bromoform	25.00	22.67	88	74-121	4	21	
Isopropylbenzene	25.00	30.34	80	71-120	9	20	
1,1,2,2-Tetrachloroethane	25.00	21.46	85	73-120	10	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	23.13	93	72-120	14	20	
Propylbenzene	25.00	28.07	85	76-120	5	20	
Bromobenzene	25.00	25.41	102	75-120	7	20	
1,3,5-Trimethylbenzene	25.00	24.47	98	77-120	7	20	
2-Chlorotoluene	25.00	23.65	95	76-120	9	20	
4-Chlorotoluene	25.00	22.57	90	78-120	7	20	
tert-Butylbenzene	25.00	20.89	82	76-120	3	21	
1,2,4-Trimethylbenzene	25.00	24.73	99	77-120	8	20	
sec-Butylbenzene	25.00	22.63	78 *	80-120	1	21	M2
para-Isopropyl Toluene	25.00	22.75	91	76-120	3	20	
1,3-Dichlorobenzene	25.00	23.04	92	75-120	6	20	
1,4-Dichlorobenzene	25.00	22.12	88	77-120	5	23	
n-Butylbenzene	25.00	36.56 b	127 *	76-120	9	21	M1 V3
1,2-Dichlorobenzene	25.00	23.51	94	76-120	5	20	
1,2-Dibromo-3-Chloropropane	25.00	21.78	85	65-120	11	22	
1,2,4-Trichlorobenzene	25.00	25.02 b	100	73-121	7	20	V3
Hexachlorobutadiene	25.00	23.00	92	73-123	2	25	
Naphthalene	25.00	40.57 b	92	62-121	8	32	V3
1,2,3-Trichlorobenzene	25.00	26.47 b	106	66-123	8	29	V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	103	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514564	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514564	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514565

Analyte	Spiked	Result		%REC	Limits	ADEQ Flags
Freon 12	20.00	21.10		105	56-140	
Chloromethane	20.00	20.00		100	46-142	
Vinyl Chloride	20.00	19.55		98	49-136	
Bromomethane	20.00	17.06		85	42-154	
Chloroethane	20.00	25.29	b	126	51-133	V3
Trichlorofluoromethane	20.00	20.34		102	63-135	
Iodomethane	20.00	13.64	b	68 *	70-130	L2 V9
Acetone	20.00	17.77		89	48-130	
1,1-Dichloroethene	20.00	20.76		104	68-133	
Methylene Chloride	20.00	19.85		99	71-120	
Carbon Disulfide	20.00	16.97		85	56-120	
MTBE	20.00	18.75		94	58-120	
trans-1,2-Dichloroethene	20.00	21.00		105	80-120	
Vinyl Acetate	20.00	15.82	b	79	63-124	V9
1,1-Dichloroethane	20.00	20.79		104	77-120	
2-Butanone	20.00	18.74		94	57-120	
cis-1,2-Dichloroethene	20.00	20.17		101	75-120	
2,2-Dichloropropane	20.00	20.01		100	72-128	
Chloroform	20.00	20.15		101	78-120	
Bromochloromethane	20.00	20.30		101	78-120	
1,1,1-Trichloroethane	20.00	21.61		108	78-120	
1,1-Dichloropropene	20.00	22.21		111	75-120	
Carbon Tetrachloride	20.00	21.89		109	80-120	
1,2-Dichloroethane	20.00	20.79		104	74-120	
Benzene	20.00	20.65		103	77-120	
Trichloroethene	20.00	21.46		107	78-122	
1,2-Dichloropropane	20.00	20.16		101	76-120	
Bromodichloromethane	20.00	20.57		103	78-120	
Dibromomethane	20.00	20.58		103	77-120	
4-Methyl-2-Pentanone	20.00	19.81		99	65-120	
cis-1,3-Dichloropropene	20.00	21.39		107	76-120	
Toluene	20.00	20.77		104	73-120	
trans-1,3-Dichloropropene	20.00	19.99		100	72-120	
1,1,2-Trichloroethane	20.00	21.78		109	76-120	
2-Hexanone	20.00	19.98		100	57-121	
1,3-Dichloropropane	20.00	22.25		111	75-120	
Tetrachloroethene	20.00	22.46		112	77-120	
Dibromochloromethane	20.00	20.86		104	76-120	
1,2-Dibromoethane	20.00	21.62		108	77-120	
Chlorobenzene	20.00	21.13		106	78-120	
1,1,1,2-Tetrachloroethane	20.00	21.16		106	77-120	
Ethylbenzene	20.00	21.65		108	78-120	
m,p-Xylenes	40.00	43.14		108	77-120	
o-Xylene	20.00	21.22		106	77-120	
Styrene	20.00	21.33		107	77-120	
Bromoform	20.00	19.86		99	74-121	
Isopropylbenzene	20.00	20.19		101	71-120	
1,1,2,2-Tetrachloroethane	20.00	21.46		107	73-120	
1,2,3-Trichloropropane	20.00	22.40		112	72-120	
Propylbenzene	20.00	22.83		114	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	20.00	21.69	108	75-120	
1,3,5-Trimethylbenzene	20.00	22.51	113	77-120	
2-Chlorotoluene	20.00	22.30	111	76-120	
4-Chlorotoluene	20.00	21.63	108	78-120	
tert-Butylbenzene	20.00	23.09	115	76-120	
1,2,4-Trimethylbenzene	20.00	22.21	111	77-120	
sec-Butylbenzene	20.00	23.71	119	80-120	
para-Isopropyl Toluene	20.00	22.10	110	76-120	
1,3-Dichlorobenzene	20.00	21.50	108	75-120	
1,4-Dichlorobenzene	20.00	21.50	107	77-120	
n-Butylbenzene	20.00	23.65	118	76-120	
1,2-Dichlorobenzene	20.00	21.69	108	76-120	
1,2-Dibromo-3-Chloropropane	20.00	20.04	100	65-120	
1,2,4-Trichlorobenzene	20.00	20.86	104	73-121	
Hexachlorobutadiene	20.00	22.95	115	73-123	
Naphthalene	20.00	22.66	113	62-121	
1,2,3-Trichlorobenzene	20.00	21.88	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	103	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514566

Analyte	Spiked	Result		%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	20.00	20.95		105	56-140	1	24	
Chloromethane	20.00	19.73		99	46-142	1	24	
Vinyl Chloride	20.00	20.17		101	49-136	3	24	
Bromomethane	20.00	17.62		88	42-154	3	24	
Chloroethane	20.00	20.73	b	104	51-133	20	25	V3
Trichlorofluoromethane	20.00	20.44		102	63-135	0	20	
Iodomethane	20.00	14.18	b	71	70-130	4	20	V9
Acetone	20.00	18.16		91	48-130	2	41	
1,1-Dichloroethene	20.00	20.94		105	68-133	1	20	
Methylene Chloride	20.00	19.70		98	71-120	1	20	
Carbon Disulfide	20.00	16.98		85	56-120	0	20	
MTBE	20.00	18.09		90	58-120	4	21	
trans-1,2-Dichloroethene	20.00	21.16		106	80-120	1	24	
Vinyl Acetate	20.00	13.99	b	70	63-124	12	24	V9
1,1-Dichloroethane	20.00	20.84		104	77-120	0	20	
2-Butanone	20.00	18.15		91	57-120	3	32	
cis-1,2-Dichloroethene	20.00	20.12		101	75-120	0	20	
2,2-Dichloropropane	20.00	19.89		99	72-128	1	24	
Chloroform	20.00	20.06		100	78-120	0	20	
Bromochloromethane	20.00	20.13		101	78-120	1	20	
1,1,1-Trichloroethane	20.00	21.76		109	78-120	1	20	
1,1-Dichloropropene	20.00	22.25		111	75-120	0	21	
Carbon Tetrachloride	20.00	22.11		111	80-120	1	21	
1,2-Dichloroethane	20.00	20.66		103	74-120	1	20	
Benzene	20.00	20.62		103	77-120	0	20	
Trichloroethene	20.00	21.64		108	78-122	1	20	
1,2-Dichloropropane	20.00	20.16		101	76-120	0	20	
Bromodichloromethane	20.00	20.36		102	78-120	1	20	
Dibromomethane	20.00	20.12		101	77-120	2	20	
4-Methyl-2-Pentanone	20.00	18.49		92	65-120	7	22	
cis-1,3-Dichloropropene	20.00	21.10		106	76-120	1	20	
Toluene	20.00	20.77		104	73-120	0	20	
trans-1,3-Dichloropropene	20.00	19.42		97	72-120	3	20	
1,1,2-Trichloroethane	20.00	21.16		106	76-120	3	20	
2-Hexanone	20.00	18.70		94	57-121	7	25	
1,3-Dichloropropane	20.00	21.70		108	75-120	3	20	
Tetrachloroethene	20.00	22.52		113	77-120	0	20	
Dibromochloromethane	20.00	20.37		102	76-120	2	20	
1,2-Dibromoethane	20.00	20.77		104	77-120	4	20	
Chlorobenzene	20.00	20.86		104	78-120	1	20	
1,1,1,2-Tetrachloroethane	20.00	20.94		105	77-120	1	20	
Ethylbenzene	20.00	21.49		107	78-120	1	26	
m,p-Xylenes	40.00	43.05		108	77-120	0	20	
o-Xylene	20.00	21.00		105	77-120	1	20	
Styrene	20.00	20.98		105	77-120	2	20	
Bromoform	20.00	18.92		95	74-121	5	21	
Isopropylbenzene	20.00	19.69		98	71-120	2	20	
1,1,2,2-Tetrachloroethane	20.00	19.74		99	73-120	8	20	
1,2,3-Trichloropropane	20.00	20.89		104	72-120	7	20	
Propylbenzene	20.00	22.30		112	76-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215064	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	20.00	21.07	105	75-120	3	20	
1,3,5-Trimethylbenzene	20.00	22.07	110	77-120	2	20	
2-Chlorotoluene	20.00	21.78	109	76-120	2	20	
4-Chlorotoluene	20.00	21.10	106	78-120	2	20	
tert-Butylbenzene	20.00	22.47	112	76-120	3	21	
1,2,4-Trimethylbenzene	20.00	21.63	108	77-120	3	20	
sec-Butylbenzene	20.00	23.12	116	80-120	3	21	
para-Isopropyl Toluene	20.00	21.49	107	76-120	3	20	
1,3-Dichlorobenzene	20.00	20.98	105	75-120	2	20	
1,4-Dichlorobenzene	20.00	20.97	105	77-120	2	23	
n-Butylbenzene	20.00	22.83	114	76-120	4	21	
1,2-Dichlorobenzene	20.00	20.99	105	76-120	3	20	
1,2-Dibromo-3-Chloropropane	20.00	18.10	91	65-120	10	22	
1,2,4-Trichlorobenzene	20.00	19.91	100	73-121	5	20	
Hexachlorobutadiene	20.00	22.03	110	73-123	4	25	
Naphthalene	20.00	20.74	104	62-121	9	32	
1,2,3-Trichlorobenzene	20.00	20.90	104	66-123	5	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469393599006 File : giu06 Time : 30-SEP-2009 10:27

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	12433	16.29	
75	30% - 60% of mass 95	33789	44.28	
95		76312	100.00	
96	5% - 9% of mass 95	4831	6.33	
173	< 2% of mass 174	130	0.20	
174	> 50% and < 100% of mass 95	65213	85.46	
175	5% - 9% of mass 174	4663	7.15	
176	> 95% and < 101% of mass 174	63722	97.71	
177	5% - 9% of mass 176	4189	6.57	

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469393599023 File : giu23 Time : 30-SEP-2009 19:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13571	16.48	
75	30% - 60% of mass 95	37362	45.38	
95		82328	100.00	
96	5% - 9% of mass 95	5444	6.61	
173	< 2% of mass 174	243	0.35	
174	> 50% and < 100% of mass 95	70056	85.09	
175	5% - 9% of mass 174	4780	6.82	
176	> 95% and < 101% of mass 174	67722	96.67	
177	5% - 9% of mass 176	4535	6.70	

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469395137001 File : gj101 Time : 01-OCT-2009 09:37

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13457	17.66	
75	30% - 60% of mass 95	34944	45.86	
95		76189	100.00	
96	5% - 9% of mass 95	5687	7.46	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	63104	82.83	
175	5% - 9% of mass 174	4511	7.15	
176	> 95% and < 101% of mass 174	62136	98.47	
177	5% - 9% of mass 176	4264	6.86	

TEW: 10/01/09 DNT: 10/02/09 LW: 10/02/09

CURTIS & TOMPKINS BFB TUNE FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469395137011 File : gj111 Time : 01-OCT-2009 15:05

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	14999	17.07	
75	30% - 60% of mass 95	40045	45.58	
95		87861	100.00	
96	5% - 9% of mass 95	5964	6.79	
173	< 2% of mass 174	413	0.57	
174	> 50% and < 100% of mass 95	72752	82.80	
175	5% - 9% of mass 174	5124	7.04	
176	> 95% and < 101% of mass 174	69909	96.09	
177	5% - 9% of mass 176	5159	7.38	

TEW: 10/01/09 DNT: 10/02/09 LW: 10/02/09

CURTIS & TOMPKINS BFB TUNE FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839393591010 File : kiu10 Time : 30-SEP-2009 11:44

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10882	16.10	
75	30% - 60% of mass 95	32085	47.47	
95		67583	100.00	
96	5% - 9% of mass 95	4777	7.07	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	56512	83.62	
175	5% - 9% of mass 174	4229	7.48	
176	> 95% and < 101% of mass 174	54238	95.98	
177	5% - 9% of mass 176	3468	6.39	

BO: 09/30/09 DNT: 10/01/09 LW: 10/01/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 MSVOA Water: EPA 8260B

Inst : MSVOA07 Name : 826GOX7
Calnum : 469393599002 Date : 30-SEP-2009 11:10 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	giu08	469393599008	.25/.5PPB	30-SEP-2009 11:10	S13034 (200000X), S13036 (200000X), S13035 (200000X), S13033 (100000X), S12921 (5000X)
L2	giu09	469393599009	0.5/1PPB	30-SEP-2009 11:40	S13034 (100000X), S13036 (100000X), S13035 (100000X), S13033 (50000X), S12921 (5000X)
L3	giu10	469393599010	2PPB	30-SEP-2009 12:11	S13034 (25000X), S13036 (25000X), S13035 (50000X), S13033 (25000X), S12921 (5000X)
L4	giu11	469393599011	5PPB	30-SEP-2009 12:41	S13034 (10000X), S13036 (10000X), S13035 (20000X), S13033 (10000X), S12921 (5000X)
L5	giu12	469393599012	10PPB	30-SEP-2009 13:12	S13034 (5000X), S13036 (5000X), S13035 (10000X), S13033 (5000X), S12921 (5000X)
L6	giu13	469393599013	20PPB	30-SEP-2009 13:43	S12998 (25000X), S13032 (25000X), S12565 (50000X), S12929 (25000X), S12921 (5000X)
L7	giu14	469393599014	50PPB	30-SEP-2009 14:13	S12998 (10000X), S13032 (10000X), S12565 (20000X), S12929 (10000X), S12921 (5000X)
L8	giu16	469393599016	100PPB	30-SEP-2009 15:15	S12998 (5000X), S13032 (5000X), S12565 (10000X), S12929 (5000X), S12921 (5000X)
L9	giu20	469393599020	75PPB	30-SEP-2009 17:48	S12998 (6667X), S13032 (6667X), S12565 (13330X), S12929 (6667X), S12921 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.3465	0.3588	0.3938	0.4177	0.3936	0.3987	0.4074	0.3881	AVRG		2.57675		0.3881	6	15	0.05	0.99	
Chloromethane		0.4519	0.4803	0.4783	0.4213	0.4246	0.4066	0.3887	0.3867	AVRG		2.32658		0.4298	9	15	0.10	0.99	
Vinyl Chloride	0.3320	0.3709	0.4171	0.4434	0.4108	0.4192	0.4049	0.3995	0.3797	AVRG		2.51574		0.3975	8	15	0.05	0.99	
Bromomethane		0.2792	0.2775	0.2629	0.2285	0.2349	0.2326	0.2368	0.2180	AVRG		4.06008		0.2463	10	15	0.05	0.99	
Chloroethane		0.3055	0.2736	0.2640	0.2343	0.2440	0.2330	0.2277	0.3160	AVRG		3.81270		0.2623	13	15	0.05	0.99	
Trichlorofluoromethane		0.4891	0.5260	0.5747	0.5771	0.5637	0.5603	0.5648	0.5412	AVRG		1.81940		0.5496	5	15	0.05	0.99	
Acetone				0.1641	0.1518	0.1219	0.1398	0.1268	0.1165	AVRG		7.30832		0.1368	14	15	0.05	0.99	
1,1-Dichloroethene		0.3209	0.3529	0.3394	0.3172	0.3288	0.2982	0.3175	0.3181	AVRG		3.08521		0.3241	5	15	0.05	0.99	
Iodomethane				0.5303	0.4675	0.4972	0.5019	0.5021	0.4906	AVRG		2.00691		0.4983	4	15	0.05	0.99	
Methylene Chloride		0.5259	0.4778	0.4531	0.4324	0.4130	0.3999	0.3951	0.3949	AVRG		2.29098		0.4365	11	15	0.05	0.99	
Carbon Disulfide		1.2264	1.3985	1.4190	1.2704	1.3482	1.2367	1.2947	1.3007	AVRG		0.76230		1.3118	5	15	0.05	0.99	
MTBE		1.3509	1.3731	1.3666	1.2135	1.2890	1.3213	1.2570	1.2197	AVRG		0.76989		1.2989	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4276	0.4377	0.4314	0.3751	0.3965	0.3698	0.3777	0.3793	AVRG		2.50380		0.3994	7	15	0.05	0.99	
Vinyl Acetate			0.8075	0.8569	0.7566	0.8237	0.7987	0.6851	0.8331	AVRG		1.25867		0.7945	7	15	0.05	0.99	
1,1-Dichloroethane		0.7137	0.7818	0.7772	0.6702	0.7020	0.6728	0.6705	0.6769	AVRG		1.41216		0.7081	7	15	0.10	0.99	
2-Butanone				0.2147	0.2081	0.1864	0.2131	0.1860	0.1745	AVRG		5.07247		0.1971	9	15	0.05	0.99	
2,2-Dichloropropane		0.5306	0.5811	0.5912	0.5235	0.5434	0.4861	0.5038	0.5593	AVRG		1.85230		0.5399	7	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4767	0.4998	0.4964	0.4290	0.4433	0.4345	0.4323	0.4348	AVRG		2.19371		0.4558	7	15	0.05	0.99	
Chloroform		0.8178	0.7499	0.7307	0.6259	0.6562	0.6318	0.6253	0.6297	AVRG		1.46326		0.6834	11	15	0.05	0.99	
Bromochloromethane		0.2076	0.2207	0.2227	0.1997	0.2121	0.2125	0.2094	0.2068	AVRG		4.72934		0.2114	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.5064	0.5835	0.5717	0.5184	0.5495	0.4796	0.5202	0.5223	AVRG		1.88165		0.5314	7	15	0.05	0.99	
1,1-Dichloropropene		0.3004	0.3666	0.3688	0.3410	0.3571	0.3059	0.3389	0.3400	AVRG		2.94257		0.3398	8	15	0.05	0.99	
Carbon Tetrachloride		0.2503	0.3007	0.3082	0.2890	0.3032	0.2514	0.2910	0.2868	AVRG		3.50798		0.2851	8	15	0.05	0.99	
1,2-Dichloroethane		0.3246	0.3492	0.3445	0.3100	0.3254	0.3251	0.3158	0.3096	AVRG		3.07204		0.3255	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.1955	1.2722	1.2435	1.1269	1.1431	1.0779	1.0728	1.0770	AVRG		0.86872		1.1511	7	15	0.05	0.99	
Trichloroethene		0.2781	0.2913	0.2864	0.2556	0.2683	0.2475	0.2637	0.2539	AVRG		3.72991		0.2681	6	15	0.05	0.99	
1,2-Dichloropropane		0.2920	0.3231	0.3278	0.2864	0.3043	0.2930	0.2920	0.2896	AVRG		3.32216		0.3010	5	15	0.05	0.99	
Bromodichloromethane		0.3403	0.3421	0.3469	0.3066	0.3242	0.3232	0.3239	0.3178	AVRG		3.04758		0.3281	4	15	0.05	0.99	
Dibromomethane		0.1627	0.1638	0.1651	0.1471	0.1573	0.1612	0.1555	0.1504	AVRG		6.33371		0.1579	4	15	0.05	0.99	
4-Methyl-2-Pentanone				0.2664	0.2394	0.2607	0.2919	0.2632	0.2395	AVRG		3.84360		0.2602	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4626	0.4691	0.4698	0.4237	0.4509	0.4463	0.4384	0.4405	AVRG		2.22138		0.4502	4	15	0.05	0.99	
Toluene		0.7868	0.8483	0.8390	0.9589	0.7727	0.7097	0.7310	0.7324	AVRG		1.25417		0.7973	10	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4286	0.4618	0.4615	0.4212	0.4424	0.4467	0.4367	0.4336	AVRG		2.26463		0.4416	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1393	0.1450	0.1423	0.1277	0.1372	0.1395	0.1350	0.1305	AVRG		7.29501		0.1371	4	15	0.05	0.99	
2-Hexanone				0.2120	0.1886	0.1929	0.2183	0.1961	0.1778	AVRG		5.06081		0.1976	8	15	0.05	0.99	
1,3-Dichloropropane		0.4684	0.4786	0.4791	0.4343	0.4611	0.4635	0.4479	0.4360	AVRG		2.18044		0.4586	4	15	0.05	0.99	
Tetrachloroethene		0.2668	0.3234	0.3253	0.2976	0.3070	0.2552	0.2987	0.2934	AVRG		3.37916		0.2959	8	15	0.05	0.99	
Dibromochloromethane		0.2489	0.2612	0.2618	0.2403	0.2603	0.2701	0.2697	0.2594	AVRG		3.86159		0.2590	4	15	0.05	0.99	
1,2-Dibromoethane		0.2573	0.2765	0.2670	0.2391	0.2604	0.2700	0.2613	0.2482	AVRG		3.84639		0.2600	5	15	0.05	0.99	
Chlorobenzene		0.8789	0.9513	0.9329	0.8095	0.8589	0.8162	0.8191	0.8172	AVRG		1.16210		0.8605	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2692	0.2946	0.2937	0.2643	0.2797	0.2748	0.2786	0.2740	AVRG		3.58918		0.2786	4	15	0.05	0.99	
Ethylbenzene		1.4634	1.5794	1.5510	1.4652	1.4397	1.2706	1.3449	1.3573	AVRG		0.69738		1.4339	7	15	0.05	0.99	
m,p-Xylenes	0.5403	0.5592	0.6410	0.6288	0.6202	0.5848	0.5231	0.5501	0.5553	AVRG		1.72989		0.5781	7	15	0.05	0.99	
o-Xylene		0.5654	0.6144	0.6186	0.5871	0.5741	0.5333	0.5484	0.5496	AVRG		1.74253		0.5739	5	15	0.05	0.99	
Styrene		0.9546	1.0386	1.0499	0.9258	0.9871	0.9491	0.9571	0.9536	AVRG		1.02357		0.9770	5	15	0.05	0.99	
Bromoform		0.1577	0.1831	0.1777	0.1602	0.1795	0.1969	0.1960	0.1802	AVRG		5.58925		0.1789	8	15	0.10	0.99	
Isopropylbenzene		2.3289	2.6211	2.6264	2.3814	2.4588	2.0388	2.3224	2.3324	AVRG		0.41862		2.3888	8	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6435	0.6608	0.6069	0.5361	0.5868	0.6071	0.5599	0.5492	AVRG		1.68409		0.5938	7	15	0.30	0.99	
1,2,3-Trichloropropane		0.6179	0.6445	0.5911	0.5130	0.5682	0.5821	0.5420	0.5163	AVRG		1.74857		0.5719	8	15	0.05	0.99	
Propylbenzene		2.8823	3.1150	3.1408	2.8675	2.9304	2.4150	2.7087	2.7637	AVRG		0.35052		2.8529	8	15	0.05	0.99	
Bromobenzene		0.6870	0.7179	0.7130	0.6276	0.6617	0.6415	0.6530	0.6446	AVRG		1.49638		0.6683	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9861	2.2996	2.2618	2.0657	2.1027	1.8113	1.9858	2.0028	AVRG		0.48438		2.0645	8	15	0.05	0.99	
2-Chlorotoluene		2.1601	2.1987	2.1366	1.8784	1.9716	1.7702	1.8494	1.8745	AVRG		0.50507		1.9799	8	15	0.05	0.99	
4-Chlorotoluene		2.0398	2.0094	2.0161	1.7717	1.8557	1.7016	1.7621	1.7797	AVRG		0.53562		1.8670	7	15	0.05	0.99	
tert-Butylbenzene		1.7000	1.9298	1.9036	1.7349	1.8034	1.4646	1.7049	1.7009	AVRG		0.57380		1.7428	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1478	2.3679	2.3180	2.2234	2.1500	1.9102	2.0386	2.0526	AVRG		0.46489		2.1510	7	15	0.05	0.99	
sec-Butylbenzene		2.3119	2.6939	2.7139	2.5155	2.5954	2.0395	2.4392	2.4542	AVRG		0.40479		2.4704	9	15	0.05	0.99	
para-Isopropyl Toluene		2.1581	2.4001	2.3931	2.1997	2.2676	1.8484	2.1597	2.1683	AVRG		0.45468		2.1994	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.2753	1.3491	1.3431	1.1776	1.2368	1.1596	1.2027	1.1973	AVRG		0.80471		1.2427	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3588	1.4005	1.3741	1.2182	1.2715	1.2081	1.2420	1.2313	AVRG		0.77636		1.2881	6	15	0.05	0.99	
n-Butylbenzene		1.7919	2.0581	2.0570	1.9181	1.9888	1.5955	1.8810	1.9165	AVRG		0.52607		1.9009	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.2209	1.2680	1.2726	1.1189	1.1777	1.1382	1.1592	1.1401	AVRG		0.84250		1.1869	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1462	0.1171	0.0954	0.1059	0.1158	0.1076	0.0967	AVRG		8.92114		0.1121	15	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8783	0.9294	0.9188	0.8370	0.8824	0.8328	0.8974	0.8692	AVRG		1.13551		0.8807	4	15	0.05	0.99	
Hexachlorobutadiene		0.2978	0.3524	0.3565	0.3350	0.3491	0.2752	0.3434	0.3508	AVRG		3.00734		0.3325	9	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.4957	1.7246	1.6183	1.4943	1.6937	1.8932	1.8767	1.7101	AVRG		0.59230		1.6883	9	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7635	0.7800	0.8041	0.7152	0.7638	0.7487	0.7867	0.7409	AVRG		1.31085		0.7629	4	15	0.05	0.99	
Dibromofluoromethane		0.4070	0.4054	0.4085	0.4084	0.4068	0.4073	0.4078	0.4123	AVRG		2.45133		0.4079	0	15	0.05	0.99	
1,2-Dichloroethane-d4		0.3024	0.3126	0.3118	0.3060	0.3104	0.3116	0.3049	0.3011	AVRG		3.25099		0.3076	1	15	0.05	0.99	
Toluene-d8		1.2913	1.2939	1.2941	1.2950	1.2955	1.2890	1.2924	1.2960	AVRG		0.77316		1.2934	0	15	0.05	0.99	
Bromofluorobenzene		0.8706	0.8806	0.8680	0.8741	0.8760	0.8648	0.8678	0.8717	AVRG		1.14719		0.8717	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-11	2.000	-8	5.000	1	10.00	8	20.00	1	50.00	3	100.0	5	75.00	0
Chloromethane			1.000	5	2.000	12	5.000	11	10.00	-2	20.00	-1	50.00	-5	100.0	-10	75.00	-10
Vinyl Chloride	0.500	-16	1.000	-7	2.000	5	5.000	12	10.00	3	20.00	5	50.00	2	100.0	1	75.00	-4
Bromomethane			1.000	13	2.000	13	5.000	7	10.00	-7	20.00	-5	50.00	-6	100.0	-4	75.00	-12
Chloroethane			1.000	16	2.000	4	5.000	1	10.00	-11	20.00	-7	50.00	-11	100.0	-13	75.00	20
Trichlorofluoromethane			1.000	-11	2.000	-4	5.000	5	10.00	5	20.00	3	50.00	2	100.0	3	75.00	-2
Acetone							5.000	20	10.00	11	20.00	-11	50.00	2	100.0	-7	75.00	-15
1,1-Dichloroethene			0.500	-1	2.000	9	5.000	5	10.00	-2	20.00	1	50.00	-8	100.0	-2	75.00	-2
Iodomethane							5.000	6	10.00	-6	20.00	0	50.00	1	100.0	1	75.00	-2
Methylene Chloride			0.500	20	2.000	9	5.000	4	10.00	-1	20.00	-5	50.00	-8	100.0	-9	75.00	-10
Carbon Disulfide			0.500	-7	2.000	7	5.000	8	10.00	-3	20.00	3	50.00	-6	100.0	-1	75.00	-1
MTBE			0.500	4	2.000	6	5.000	5	10.00	-7	20.00	-1	50.00	2	100.0	-3	75.00	-6
trans-1,2-Dichloroethene			0.500	7	2.000	10	5.000	8	10.00	-6	20.00	-1	50.00	-7	100.0	-5	75.00	-5
Vinyl Acetate					2.000	2	5.000	8	10.00	-5	20.00	4	50.00	1	100.0	-14	75.00	5
1,1-Dichloroethane			0.500	1	2.000	10	5.000	10	10.00	-5	20.00	-1	50.00	-5	100.0	-5	75.00	-4
2-Butanone							5.000	9	10.00	6	20.00	-5	50.00	8	100.0	-6	75.00	-11
2,2-Dichloropropane			0.500	-2	2.000	8	5.000	10	10.00	-3	20.00	1	50.00	-10	100.0	-7	75.00	4
cis-1,2-Dichloroethene			0.500	5	2.000	10	5.000	9	10.00	-6	20.00	-3	50.00	-5	100.0	-5	75.00	-5
Chloroform			0.500	20	2.000	10	5.000	7	10.00	-8	20.00	-4	50.00	-8	100.0	-9	75.00	-8
Bromochloromethane			0.500	-2	2.000	4	5.000	5	10.00	-6	20.00	0	50.00	0	100.0	-1	75.00	-2
1,1,1-Trichloroethane			0.500	-5	2.000	10	5.000	8	10.00	-2	20.00	3	50.00	-10	100.0	-2	75.00	-2
1,1-Dichloropropene			0.500	-12	2.000	8	5.000	9	10.00	0	20.00	5	50.00	-10	100.0	0	75.00	0
Carbon Tetrachloride			0.500	-12	2.000	5	5.000	8	10.00	1	20.00	6	50.00	-12	100.0	2	75.00	1
1,2-Dichloroethane			0.500	0	2.000	7	5.000	6	10.00	-5	20.00	0	50.00	0	100.0	-3	75.00	-5
Benzene			0.500	4	2.000	11	5.000	8	10.00	-2	20.00	-1	50.00	-6	100.0	-7	75.00	-6
Trichloroethene			0.500	4	2.000	9	5.000	7	10.00	-5	20.00	0	50.00	-8	100.0	-2	75.00	-5
1,2-Dichloropropane			0.500	-3	2.000	7	5.000	9	10.00	-5	20.00	1	50.00	-3	100.0	-3	75.00	-4
Bromodichloromethane			0.500	4	2.000	4	5.000	6	10.00	-7	20.00	-1	50.00	-1	100.0	-1	75.00	-3
Dibromomethane			0.500	3	2.000	4	5.000	5	10.00	-7	20.00	0	50.00	2	100.0	-1	75.00	-5
4-Methyl-2-Pentanone							5.000	2	10.00	-8	20.00	0	50.00	12	100.0	1	75.00	-8
cis-1,3-Dichloropropene			0.500	3	2.000	4	5.000	4	10.00	-6	20.00	0	50.00	-1	100.0	-3	75.00	-2
Toluene			0.500	-1	2.000	6	5.000	5	10.00	20	20.00	-3	50.00	-11	100.0	-8	75.00	-8
trans-1,3-Dichloropropene			0.500	-3	2.000	5	5.000	5	10.00	-5	20.00	0	50.00	1	100.0	-1	75.00	-2
1,1,2-Trichloroethane			0.500	2	2.000	6	5.000	4	10.00	-7	20.00	0	50.00	2	100.0	-2	75.00	-5
2-Hexanone							5.000	7	10.00	-5	20.00	-2	50.00	10	100.0	-1	75.00	-10
1,3-Dichloropropane			0.500	2	2.000	4	5.000	4	10.00	-5	20.00	1	50.00	1	100.0	-2	75.00	-5
Tetrachloroethene			0.500	-10	2.000	9	5.000	10	10.00	1	20.00	4	50.00	-14	100.0	1	75.00	-1
Dibromochloromethane			0.500	-4	2.000	1	5.000	1	10.00	-7	20.00	1	50.00	4	100.0	4	75.00	0
1,2-Dibromoethane			0.500	-1	2.000	6	5.000	3	10.00	-8	20.00	0	50.00	4	100.0	0	75.00	-5
Chlorobenzene			0.500	2	2.000	11	5.000	8	10.00	-6	20.00	0	50.00	-5	100.0	-5	75.00	-5
1,1,1,2-Tetrachloroethane			0.500	-3	2.000	6	5.000	5	10.00	-5	20.00	0	50.00	-1	100.0	0	75.00	-2
Ethylbenzene			0.500	2	2.000	10	5.000	8	10.00	2	20.00	0	50.00	-11	100.0	-6	75.00	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-7	1.000	-3	4.000	11	10.00	9	20.00	7	40.00	1	100.0	-10	200.0	-5	150.0	-4
o-Xylene			0.500	-1	2.000	7	5.000	8	10.00	2	20.00	0	50.00	-7	100.0	-4	75.00	-4
Styrene			0.500	-2	2.000	6	5.000	7	10.00	-5	20.00	1	50.00	-3	100.0	-2	75.00	-2
Bromoform			0.500	-12	2.000	2	5.000	-1	10.00	-10	20.00	0	50.00	10	100.0	10	75.00	1
Isopropylbenzene			0.500	-3	2.000	10	5.000	10	10.00	0	20.00	3	50.00	-15	100.0	-3	75.00	-2
1,1,2,2-Tetrachloroethane			0.500	8	2.000	11	5.000	2	10.00	-10	20.00	-1	50.00	2	100.0	-6	75.00	-8
1,2,3-Trichloropropane			0.500	8	2.000	13	5.000	3	10.00	-10	20.00	-1	50.00	2	100.0	-5	75.00	-10
Propylbenzene			0.500	1	2.000	9	5.000	10	10.00	1	20.00	3	50.00	-15	100.0	-5	75.00	-3
Bromobenzene			0.500	3	2.000	7	5.000	7	10.00	-6	20.00	-1	50.00	-4	100.0	-2	75.00	-4
1,3,5-Trimethylbenzene			0.500	-4	2.000	11	5.000	10	10.00	0	20.00	2	50.00	-12	100.0	-4	75.00	-3
2-Chlorotoluene			0.500	9	2.000	11	5.000	8	10.00	-5	20.00	0	50.00	-11	100.0	-7	75.00	-5
4-Chlorotoluene			0.500	9	2.000	8	5.000	8	10.00	-5	20.00	-1	50.00	-9	100.0	-6	75.00	-5
tert-Butylbenzene			0.500	-2	2.000	11	5.000	9	10.00	0	20.00	3	50.00	-16	100.0	-2	75.00	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	10	5.000	8	10.00	3	20.00	0	50.00	-11	100.0	-5	75.00	-5
sec-Butylbenzene			0.500	-6	2.000	9	5.000	10	10.00	2	20.00	5	50.00	-17	100.0	-1	75.00	-1
para-Isopropyl Toluene			0.500	-2	2.000	9	5.000	9	10.00	0	20.00	3	50.00	-16	100.0	-2	75.00	-1
1,3-Dichlorobenzene			0.500	3	2.000	9	5.000	8	10.00	-5	20.00	0	50.00	-7	100.0	-3	75.00	-4
1,4-Dichlorobenzene			0.500	5	2.000	9	5.000	7	10.00	-5	20.00	-1	50.00	-6	100.0	-4	75.00	-4
n-Butylbenzene			0.500	-6	2.000	8	5.000	8	10.00	1	20.00	5	50.00	-16	100.0	-1	75.00	1
1,2-Dichlorobenzene			0.500	3	2.000	7	5.000	7	10.00	-6	20.00	-1	50.00	-4	100.0	-2	75.00	-4
1,2-Dibromo-3-Chloropropane					2.000	**30**	5.000	4	10.00	-15	20.00	-6	50.00	3	100.0	-4	75.00	-14
1,2,4-Trichlorobenzene			0.500	0	2.000	6	5.000	4	10.00	-5	20.00	0	50.00	-5	100.0	2	75.00	-1
Hexachlorobutadiene			0.500	-10	2.000	6	5.000	7	10.00	1	20.00	5	50.00	-17	100.0	3	75.00	5
Naphthalene			0.500	-11	2.000	2	5.000	-4	10.00	-11	20.00	0	50.00	12	100.0	11	75.00	1
1,2,3-Trichlorobenzene			0.500	0	2.000	2	5.000	5	10.00	-6	20.00	0	50.00	-2	100.0	3	75.00	-3
Dibromofluoromethane			50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	1
1,2-Dichloroethane-d4			50.00	-2	50.00	2	50.00	1	50.00	-1	50.00	1	50.00	1	50.00	-1	50.00	-2
Toluene-d8			50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0
Bromofluorobenzene			50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 Name : 826GOX7
Calnum : 469393599002 Cal Date : 30-SEP-2009 Type : WATER

ICV 469393599025 (giu25 30-SEP-2009) stds: S12996 (10000X), S13055 (10000X), S12693 (10000X), S12925 (10000X), S12921 (5000X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.51	ug/L	10	25	
Chloromethane	25.00	24.63	ug/L	-1	25	
Vinyl Chloride	25.00	24.66	ug/L	-1	25	
Bromomethane	25.00	25.23	ug/L	1	25	
Chloroethane	25.00	24.55	ug/L	-2	25	
Trichlorofluoromethane	25.00	26.09	ug/L	4	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	25.34	ug/L	1	25	
Iodomethane	25.00	27.16	ug/L	9	25	
Methylene Chloride	25.00	24.75	ug/L	-1	25	
Carbon Disulfide	25.00	20.99	ug/L	-16	25	
MTBE	25.00	25.35	ug/L	1	25	
trans-1,2-Dichloroethene	25.00	26.21	ug/L	5	25	
Vinyl Acetate	25.00	26.14	ug/L	5	25	
1,1-Dichloroethane	25.00	25.76	ug/L	3	25	
2-Butanone	25.00	28.00	ug/L	12	25	
2,2-Dichloropropane	25.00	26.68	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	25.48	ug/L	2	25	
Chloroform	25.00	25.11	ug/L	0	25	
Bromochloromethane	25.00	26.53	ug/L	6	25	
1,1,1-Trichloroethane	25.00	26.19	ug/L	5	25	
1,1-Dichloropropene	25.00	27.10	ug/L	8	25	
Carbon Tetrachloride	25.00	26.72	ug/L	7	25	
1,2-Dichloroethane	25.00	26.79	ug/L	7	25	
Benzene	25.00	25.76	ug/L	3	25	
Trichloroethene	25.00	25.89	ug/L	4	25	
1,2-Dichloropropane	25.00	25.72	ug/L	3	25	
Bromodichloromethane	25.00	26.63	ug/L	7	25	
Dibromomethane	25.00	27.06	ug/L	8	25	
4-Methyl-2-Pentanone	25.00	27.46	ug/L	10	25	
cis-1,3-Dichloropropene	25.00	27.96	ug/L	12	25	
Toluene	25.00	25.10	ug/L	0	25	
trans-1,3-Dichloropropene	25.00	25.70	ug/L	3	25	
1,1,2-Trichloroethane	25.00	27.83	ug/L	11	25	
2-Hexanone	25.00	27.59	ug/L	10	25	
1,3-Dichloropropane	25.00	27.90	ug/L	12	25	
Tetrachloroethene	25.00	26.96	ug/L	8	25	
Dibromochloromethane	25.00	27.71	ug/L	11	25	
1,2-Dibromoethane	25.00	27.89	ug/L	12	25	
Chlorobenzene	25.00	26.08	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	26.58	ug/L	6	25	
Ethylbenzene	25.00	26.32	ug/L	5	25	
m,p-Xylenes	50.00	52.90	ug/L	6	25	
o-Xylene	25.00	26.28	ug/L	5	25	
Styrene	25.00	26.83	ug/L	7	25	
Bromoform	25.00	28.39	ug/L	14	25	
Isopropylbenzene	25.00	23.76	ug/L	-5	25	
1,1,2,2-Tetrachloroethane	25.00	28.40	ug/L	14	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	28.18	ug/L	13	25	
Propylbenzene	25.00	26.88	ug/L	8	25	
Bromobenzene	25.00	26.46	ug/L	6	25	
1,3,5-Trimethylbenzene	25.00	26.84	ug/L	7	25	
2-Chlorotoluene	25.00	26.40	ug/L	6	25	
4-Chlorotoluene	25.00	25.98	ug/L	4	25	
tert-Butylbenzene	25.00	27.34	ug/L	9	25	
1,2,4-Trimethylbenzene	25.00	26.50	ug/L	6	25	
sec-Butylbenzene	25.00	28.22	ug/L	13	25	
para-Isopropyl Toluene	25.00	26.66	ug/L	7	25	
1,3-Dichlorobenzene	25.00	26.24	ug/L	5	25	
1,4-Dichlorobenzene	25.00	26.29	ug/L	5	25	
n-Butylbenzene	25.00	28.82	ug/L	15	25	
1,2-Dichlorobenzene	25.00	26.60	ug/L	6	25	
1,2-Dibromo-3-Chloropropane	25.00	27.52	ug/L	10	25	
1,2,4-Trichlorobenzene	25.00	26.65	ug/L	7	25	
Hexachlorobutadiene	25.00	29.26	ug/L	17	25	
Naphthalene	25.00	30.45	ug/L	**22**	25	
1,2,3-Trichlorobenzene	25.00	28.11	ug/L	12	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215064 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	**-24**	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	**21**	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	**35**	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	**-23**	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	**97**	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	**41**	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	**24**	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	**-22**	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 IDF : 1.0
Seqnum : 469395137003.1 File : gj103 Time : 01-OCT-2009 10:46
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (12500X), S13055 (12500X), S12693 (12500X), S12925 (12500X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4174	20.00	21.51	ug/L	8	20	0.0500	
Chloromethane	0.4298	0.4377	20.00	20.37	ug/L	2	20	0.1000	
Vinyl Chloride	0.3975	0.3891	20.00	19.58	ug/L	-2	20	0.0500	
Bromomethane	0.2463	0.1965	20.00	15.96	ug/L	-20	20	0.0500	
Chloroethane	0.2623	0.3518	20.00	26.82	ug/L	**34**	20	0.0500	c+ ***
Trichlorofluoromethane	0.5496	0.5703	20.00	20.75	ug/L	4	20	0.0500	
Acetone	0.1368	0.1249	20.00	18.25	ug/L	-9	20	0.0500	
1,1-Dichloroethene	0.3241	0.3438	20.00	21.21	ug/L	6	20	0.0500	
Iodomethane	0.4983	0.4143	20.00	16.63	ug/L	-17	20	0.0500	
Methylene Chloride	0.4365	0.4418	20.00	20.24	ug/L	1	20	0.0500	
Carbon Disulfide	1.3118	1.1421	20.00	17.41	ug/L	-13	20	0.0500	
MTBE	1.2989	1.2751	20.00	19.63	ug/L	-2	20	0.0500	
trans-1,2-Dichloroethene	0.3994	0.4259	20.00	21.33	ug/L	7	20	0.0500	
Vinyl Acetate	0.7945	0.8288	20.00	20.86	ug/L	4	20	0.0500	
1,1-Dichloroethane	0.7081	0.7618	20.00	21.52	ug/L	8	20	0.1000	
2-Butanone	0.1971	0.2034	20.00	20.63	ug/L	3	20	0.0500	
2,2-Dichloropropane	0.5399	0.5944	20.00	22.02	ug/L	10	20	0.0500	
cis-1,2-Dichloroethene	0.4558	0.4704	20.00	20.64	ug/L	3	20	0.0500	
Chloroform	0.6834	0.7104	20.00	20.79	ug/L	4	20	0.0500	
Bromochloromethane	0.2114	0.2220	20.00	21.00	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.5314	0.5902	20.00	22.21	ug/L	11	20	0.0500	
1,1-Dichloropropene	0.3398	0.3809	20.00	22.41	ug/L	12	20	0.0500	
Carbon Tetrachloride	0.2851	0.3181	20.00	22.32	ug/L	12	20	0.0500	
1,2-Dichloroethane	0.3255	0.3567	20.00	21.92	ug/L	10	20	0.0500	
Benzene	1.1511	1.2087	20.00	21.00	ug/L	5	20	0.0500	
Trichloroethene	0.2681	0.2836	20.00	21.16	ug/L	6	20	0.0500	
1,2-Dichloropropane	0.3010	0.3111	20.00	20.67	ug/L	3	20	0.0500	
Bromodichloromethane	0.3281	0.3445	20.00	21.00	ug/L	5	20	0.0500	
Dibromomethane	0.1579	0.1691	20.00	21.42	ug/L	7	20	0.0500	
4-Methyl-2-Pentanone	0.2602	0.2749	20.00	21.13	ug/L	6	20	0.0500	
cis-1,3-Dichloropropene	0.4502	0.5018	20.00	22.30	ug/L	11	20	0.0500	
Toluene	0.7973	0.8362	20.00	20.98	ug/L	5	20	0.0500	
trans-1,3-Dichloropropene	0.4416	0.4572	20.00	20.71	ug/L	4	20	0.0500	
1,1,2-Trichloroethane	0.1371	0.1524	20.00	22.23	ug/L	11	20	0.0500	
2-Hexanone	0.1976	0.2055	20.00	20.80	ug/L	4	20	0.0500	
1,3-Dichloropropane	0.4586	0.5198	20.00	22.67	ug/L	13	20	0.0500	
Tetrachloroethene	0.2959	0.3246	20.00	21.94	ug/L	10	20	0.0500	
Dibromochloromethane	0.2590	0.2765	20.00	21.35	ug/L	7	20	0.0500	
1,2-Dibromoethane	0.2600	0.2885	20.00	22.20	ug/L	11	20	0.0500	
Chlorobenzene	0.8605	0.9132	20.00	21.23	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2786	0.2958	20.00	21.23	ug/L	6	20	0.0500	
Ethylbenzene	1.4339	1.5639	20.00	21.81	ug/L	9	20	0.0500	
m,p-Xylenes	0.5781	0.6285	40.00	43.49	ug/L	9	20	0.0500	
o-Xylene	0.5739	0.6141	20.00	21.40	ug/L	7	20	0.0500	
Styrene	0.9770	1.0488	20.00	21.47	ug/L	7	20	0.0500	
Bromoform	0.1789	0.1830	20.00	20.45	ug/L	2	20	0.1000	
Isopropylbenzene	2.3888	2.3755	20.00	19.89	ug/L	-1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6821	20.00	22.98	ug/L	15	20	0.3000	
1,2,3-Trichloropropane	0.5719	0.6623	20.00	23.16	ug/L	16	20	0.0500	
Propylbenzene	2.8529	3.2151	20.00	22.54	ug/L	13	20	0.0500	
Bromobenzene	0.6683	0.7222	20.00	21.61	ug/L	8	20	0.0500	
1,3,5-Trimethylbenzene	2.0645	2.3017	20.00	22.30	ug/L	11	20	0.0500	
2-Chlorotoluene	1.9799	2.2066	20.00	22.29	ug/L	11	20	0.0500	
4-Chlorotoluene	1.8670	2.0214	20.00	21.65	ug/L	8	20	0.0500	
tert-Butylbenzene	1.7428	1.9611	20.00	22.51	ug/L	13	20	0.0500	
1,2,4-Trimethylbenzene	2.1510	2.3666	20.00	22.00	ug/L	10	20	0.0500	
sec-Butylbenzene	2.4704	2.8503	20.00	23.08	ug/L	15	20	0.0500	
para-Isopropyl Toluene	2.1994	2.3753	20.00	21.60	ug/L	8	20	0.0500	
1,3-Dichlorobenzene	1.2427	1.3291	20.00	21.39	ug/L	7	20	0.0500	
1,4-Dichlorobenzene	1.2881	1.3827	20.00	21.47	ug/L	7	20	0.0500	
n-Butylbenzene	1.9009	2.2132	20.00	23.29	ug/L	16	20	0.0500	
1,2-Dichlorobenzene	1.1869	1.2847	20.00	21.65	ug/L	8	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1121	0.1202	20.00	21.46	ug/L	7	20	0.0500	
1,2,4-Trichlorobenzene	0.8807	0.9119	20.00	20.71	ug/L	4	20	0.0500	
Hexachlorobutadiene	0.3325	0.3672	20.00	22.08	ug/L	10	20	0.0500	
Naphthalene	1.6883	1.9657	20.00	23.29	ug/L	16	20	0.0500	
1,2,3-Trichlorobenzene	0.7629	0.8290	20.00	21.73	ug/L	9	20	0.0500	
Dibromofluoromethane	0.4079	0.4193	50.00	51.39	ug/L	3	20	0.0500	
1,2-Dichloroethane-d4	0.3076	0.3258	50.00	52.97	ug/L	6	20	0.0500	
Toluene-d8	1.2934	1.3323	50.00	51.50	ug/L	3	20	0.0500	
Bromofluorobenzene	0.8717	0.8984	50.00	51.53	ug/L	3	20	0.0500	

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1085092	-2.66	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1665487	-0.65	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1551217	-3.71	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	861724	-7.52	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : QC514565 IDF : 1.0
Seqnum : 469395137013.1 File : gj113 Time : 01-OCT-2009 16:14
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (12500X), S13055 (12500X), S12693 (12500X), S12925 (12500X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4094	20.00	21.10	ug/L	5	20	0.0500	u
Chloromethane	0.4298	0.4299	20.00	20.00	ug/L	0	20	0.1000	u
Vinyl Chloride	0.3975	0.3885	20.00	19.55	ug/L	-2	20	0.0500	u
Bromomethane	0.2463	0.2101	20.00	17.06	ug/L	-15	20	0.0500	u
Chloroethane	0.2623	0.3316	20.00	25.29	ug/L	**26**	20	0.0500	c+ u ***
Trichlorofluoromethane	0.5496	0.5590	20.00	20.34	ug/L	2	20	0.0500	u
Iodomethane	0.4983	0.3398	20.00	13.64	ug/L	**-32**	20	0.0500	c- u ***
Acetone	0.1368	0.1216	20.00	17.77	ug/L	-11	20	0.0500	u
1,1-Dichloroethene	0.3241	0.3364	20.00	20.76	ug/L	4	20	0.0500	u
Methylene Chloride	0.4365	0.4332	20.00	19.85	ug/L	-1	20	0.0500	u
Carbon Disulfide	1.3118	1.1129	20.00	16.97	ug/L	-15	20	0.0500	u
MTBE	1.2989	1.2180	20.00	18.75	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.3994	0.4194	20.00	21.00	ug/L	5	20	0.0500	u
Vinyl Acetate	0.7945	0.6283	20.00	15.82	ug/L	**-21**	20	0.0500	c- u ***
1,1-Dichloroethane	0.7081	0.7362	20.00	20.79	ug/L	4	20	0.1000	u
2-Butanone	0.1971	0.1847	20.00	18.74	ug/L	-6	20	0.0500	u
cis-1,2-Dichloroethene	0.4558	0.4596	20.00	20.17	ug/L	1	20	0.0500	u
2,2-Dichloropropane	0.5399	0.5401	20.00	20.01	ug/L	0	20	0.0500	u
Chloroform	0.6834	0.6884	20.00	20.15	ug/L	1	20	0.0500	u
Bromochloromethane	0.2114	0.2146	20.00	20.30	ug/L	1	20	0.0500	u
1,1,1-Trichloroethane	0.5314	0.5742	20.00	21.61	ug/L	8	20	0.0500	u
1,1-Dichloropropene	0.3398	0.3774	20.00	22.21	ug/L	11	20	0.0500	u
Carbon Tetrachloride	0.2851	0.3120	20.00	21.89	ug/L	9	20	0.0500	u
1,2-Dichloroethane	0.3255	0.3384	20.00	20.79	ug/L	4	20	0.0500	u
Benzene	1.1511	1.1887	20.00	20.65	ug/L	3	20	0.0500	u
Trichloroethene	0.2681	0.2876	20.00	21.46	ug/L	7	20	0.0500	u
1,2-Dichloropropane	0.3010	0.3035	20.00	20.16	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3281	0.3375	20.00	20.57	ug/L	3	20	0.0500	u
Dibromomethane	0.1579	0.1624	20.00	20.58	ug/L	3	20	0.0500	u
4-Methyl-2-Pentanone	0.2602	0.2577	20.00	19.81	ug/L	-1	20	0.0500	u
cis-1,3-Dichloropropene	0.4502	0.4815	20.00	21.39	ug/L	7	20	0.0500	u
Toluene	0.7973	0.8278	20.00	20.77	ug/L	4	20	0.0500	u
trans-1,3-Dichloropropene	0.4416	0.4413	20.00	19.99	ug/L	0	20	0.0500	u
1,1,2-Trichloroethane	0.1371	0.1493	20.00	21.78	ug/L	9	20	0.0500	u
2-Hexanone	0.1976	0.1974	20.00	19.98	ug/L	0	20	0.0500	u
1,3-Dichloropropane	0.4586	0.5101	20.00	22.25	ug/L	11	20	0.0500	u
Tetrachloroethene	0.2959	0.3323	20.00	22.46	ug/L	12	20	0.0500	u
Dibromochloromethane	0.2590	0.2700	20.00	20.86	ug/L	4	20	0.0500	u
1,2-Dibromoethane	0.2600	0.2810	20.00	21.62	ug/L	8	20	0.0500	u
Chlorobenzene	0.8605	0.9093	20.00	21.13	ug/L	6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.2786	0.2947	20.00	21.16	ug/L	6	20	0.0500	u
Ethylbenzene	1.4339	1.5523	20.00	21.65	ug/L	8	20	0.0500	u
m,p-Xylenes	0.5781	0.6235	40.00	43.14	ug/L	8	20	0.0500	u
o-Xylene	0.5739	0.6088	20.00	21.22	ug/L	6	20	0.0500	u
Styrene	0.9770	1.0421	20.00	21.33	ug/L	7	20	0.0500	u
Bromoform	0.1789	0.1777	20.00	19.86	ug/L	-1	20	0.1000	u
Isopropylbenzene	2.3888	2.4114	20.00	20.19	ug/L	1	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6372	20.00	21.46	ug/L	7	20	0.3000	u
1,2,3-Trichloropropane	0.5719	0.6406	20.00	22.40	ug/L	12	20	0.0500	u
Propylbenzene	2.8529	3.2566	20.00	22.83	ug/L	14	20	0.0500	u
Bromobenzene	0.6683	0.7248	20.00	21.69	ug/L	8	20	0.0500	u
1,3,5-Trimethylbenzene	2.0645	2.3239	20.00	22.51	ug/L	13	20	0.0500	u
2-Chlorotoluene	1.9799	2.2075	20.00	22.30	ug/L	11	20	0.0500	u
4-Chlorotoluene	1.8670	2.0188	20.00	21.63	ug/L	8	20	0.0500	u
tert-Butylbenzene	1.7428	2.0123	20.00	23.09	ug/L	15	20	0.0500	u
1,2,4-Trimethylbenzene	2.1510	2.3890	20.00	22.21	ug/L	11	20	0.0500	u
sec-Butylbenzene	2.4704	2.9285	20.00	23.71	ug/L	19	20	0.0500	u
para-Isopropyl Toluene	2.1994	2.4299	20.00	22.10	ug/L	10	20	0.0500	u
1,3-Dichlorobenzene	1.2427	1.3359	20.00	21.50	ug/L	8	20	0.0500	u
1,4-Dichlorobenzene	1.2881	1.3846	20.00	21.50	ug/L	7	20	0.0500	u
n-Butylbenzene	1.9009	2.2478	20.00	23.65	ug/L	18	20	0.0500	u
1,2-Dichlorobenzene	1.1869	1.2871	20.00	21.69	ug/L	8	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1121	0.1123	20.00	20.04	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	0.8807	0.9185	20.00	20.86	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.3325	0.3816	20.00	22.95	ug/L	15	20	0.0500	u
Naphthalene	1.6883	1.9128	20.00	22.66	ug/L	13	20	0.0500	u
1,2,3-Trichlorobenzene	0.7629	0.8344	20.00	21.88	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.4079	0.4139	50.00	50.72	ug/L	1	20	0.0500	u
1,2-Dichloroethane-d4	0.3076	0.3155	50.00	51.29	ug/L	3	20	0.0500	u
Toluene-d8	1.2934	1.3412	50.00	51.85	ug/L	4	20	0.0500	u
Bromofluorobenzene	0.8717	0.8988	50.00	51.55	ug/L	3	20	0.0500	u

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1132189	1.57	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1721584	2.69	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1583957	-1.68	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	866769	-6.98	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215064 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC514336 IDF : 1.0
Seqnum : 839393591011.6 File : kiu11 Time : 30-SEP-2009 11:57
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.6301	25.00	29.42	ug/L	18	20	0.0500	u
Chloromethane	0.5160	0.6018	25.00	29.16	ug/L	17	20	0.1000	u
Vinyl Chloride	0.5175	0.5993	25.00	28.95	ug/L	16	20	0.0500	u
Bromomethane	0.2608	0.3345	25.00	32.06	ug/L	**28**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.3546	25.00	21.65	ug/L	-13	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8131	25.00	27.41	ug/L	10	20	0.0500	u
Iodomethane	0.2599	0.4535	25.00	41.07	ug/L	**64**	20	0.0500	c+ u ***
Acetone	0.1382	0.1611	25.00	29.16	ug/L	17	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4394	25.00	29.31	ug/L	17	20	0.0500	u
Methylene Chloride	0.5280	0.5914	25.00	28.00	ug/L	12	20	0.0500	u
Carbon Disulfide	1.4090	1.5062	25.00	26.72	ug/L	7	20	0.0500	u
MTBE	1.5447	1.6688	25.00	27.01	ug/L	8	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5573	25.00	30.53	ug/L	**22**	20	0.0500	c+ u ***
Vinyl Acetate	0.9726	0.9690	25.00	24.91	ug/L	0	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0195	25.00	27.10	ug/L	8	20	0.1000	u
2-Butanone	0.2331	0.2606	25.00	27.95	ug/L	12	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6256	25.00	28.75	ug/L	15	20	0.0500	u
2,2-Dichloropropane	0.7134	0.8137	25.00	28.51	ug/L	14	20	0.0500	u
Chloroform	0.9238	0.9971	25.00	26.99	ug/L	8	20	0.0500	u
Bromochloromethane	0.2354	0.2827	25.00	30.02	ug/L	20	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.8260	25.00	29.36	ug/L	17	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4510	25.00	26.74	ug/L	7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3804	25.00	27.30	ug/L	9	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4392	25.00	25.00	ug/L	0	20	0.0500	u
Benzene	1.3404	1.4402	25.00	26.86	ug/L	7	20	0.0500	u
Trichloroethene	0.3158	0.3674	25.00	29.09	ug/L	16	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3724	25.00	25.90	ug/L	4	20	0.0500	u
Bromodichloromethane	0.3863	0.4383	25.00	28.36	ug/L	13	20	0.0500	u
Dibromomethane	0.1802	0.2007	25.00	27.85	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2938	25.00	24.13	ug/L	-3	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.6019	25.00	29.12	ug/L	16	20	0.0500	u
Toluene	0.9593	0.9220	25.00	24.03	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5009	25.00	21.85	ug/L	-13	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1656	25.00	23.67	ug/L	-5	20	0.0500	u
2-Hexanone	0.2445	0.2162	25.00	22.10	ug/L	-12	20	0.0500	u
1,3-Dichloropropane	0.6133	0.5724	25.00	23.33	ug/L	-7	20	0.0500	u
Tetrachloroethene	0.3329	0.3325	25.00	24.97	ug/L	0	20	0.0500	u
Dibromochloromethane	0.3027	0.3065	25.00	25.31	ug/L	1	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3007	25.00	24.66	ug/L	-1	20	0.0500	u
Chlorobenzene	1.0519	1.0074	25.00	23.94	ug/L	-4	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3305	25.00	24.61	ug/L	-2	20	0.0500	u
Ethylbenzene	1.8115	1.7802	25.00	24.57	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.6304	0.5962	50.00	47.29	ug/L	-5	20	0.0500	u
o-Xylene	0.6283	0.5783	25.00	23.01	ug/L	-8	20	0.0500	u
Styrene	1.0367	0.9961	25.00	24.02	ug/L	-4	20	0.0500	u
Bromoform	0.1849	0.1969	25.00	23.05	ug/L	-8	20	0.1000	u
Isopropylbenzene	3.8595	3.6192	25.00	23.44	ug/L	-6	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9727	25.00	25.36	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1401	25.00	27.85	ug/L	11	20	0.0500	u
Propylbenzene	3.9448	3.5374	25.00	22.42	ug/L	-10	20	0.0500	u
Bromobenzene	1.0220	1.1748	25.00	28.74	ug/L	15	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.1201	25.00	28.44	ug/L	14	20	0.0500	u
2-Chlorotoluene	3.1099	3.3160	25.00	26.66	ug/L	7	20	0.0500	u
4-Chlorotoluene	2.6572	2.6074	25.00	24.53	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.7712	25.00	20.39	ug/L	-18	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.1389	25.00	29.74	ug/L	19	20	0.0500	u
sec-Butylbenzene	3.1284	2.5641	25.00	20.49	ug/L	-18	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.5448	25.00	25.51	ug/L	2	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6948	25.00	25.07	ug/L	0	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5847	25.00	23.95	ug/L	-4	20	0.0500	u
n-Butylbenzene	2.4331	2.7840	25.00	36.35	ug/L	**45**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6379	25.00	25.40	ug/L	2	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1760	25.00	25.01	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.3136	25.00	30.19	ug/L	**21**	20	0.0500	c+ u ***
Hexachlorobutadiene	0.4373	0.4177	25.00	23.88	ug/L	-4	20	0.0500	u
Naphthalene	2.7279	3.5846	25.00	32.85	ug/L	**31**	20	0.0500	c+ u ***
1,2,3-Trichlorobenzene	1.0079	1.2748	25.00	31.62	ug/L	**26**	20	0.0500	c+ u ***
Dibromofluoromethane	0.4472	0.4591	50.00	51.33	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3625	50.00	48.50	ug/L	-3	20	0.0500	u
Toluene-d8	1.4811	1.3247	50.00	44.72	ug/L	-11	20	0.0500	u
Bromofluorobenzene	1.2424	1.4000	50.00	56.34	ug/L	13	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1727388	14.75	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3007676	22.92	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3083930	44.37	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1072157	9.02	17.10	17.10	0.00

5% spike rule

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 469395137

Date : 10/01/09 Reference : giu14
Sequence : MSVOA07 gj1 Analyzed : 09/30/09 14:13

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1114691	9.90	1676421	11.04	1610987	15.17	931776	17.89
		LOWER LIMIT	557346	9.40	838211	10.54	805494	14.67	465888	17.39
		UPPER LIMIT	2229382	10.40	3352842	11.54	3221974	15.67	1863552	18.39
003	CCV		1085092	9.90	1665487	11.04	1551217	15.17	861724	17.89
006	BLANK	QC514564	1057352	9.90	1616700	11.04	1499931	15.17	820140	17.89
007	SAMPLE	215064-004	1037102	9.90	1604959	11.04	1473849	15.17	802267	17.89
008	SAMPLE	215064-005	1129361	9.90	1715030	11.04	1592337	15.17	872629	17.89
009	SAMPLE	215072-007	1153934	9.90	1752987	11.04	1619329	15.17	897048	17.89
010	SAMPLE	215072-006	1157585	9.90	1744025	11.04	1618833	15.17	897037	17.89
013	CCV/BS	QC514565	1132189	9.90	1721584	11.04	1583957	15.17	866769	17.89
014	BSD	QC514566	1145226	9.90	1737553	11.04	1610223	15.17	895212	17.89
016	BLANK	QC514686	1097122	9.90	1676931	11.04	1550358	15.17	848899	17.89
017	SAMPLE	215097-002	1083024	9.90	1658319	11.04	1532686	15.17	834982	17.89
018	SAMPLE	215159-011	1053025	9.90	1616546	11.04	1503681	15.17	815300	17.89
019	SAMPLE	215071-013	1033148	9.90	1595500	11.04	1475530	15.17	797929	17.89
020	SAMPLE	215159-001	1016148	9.90	1574456	11.04	1459809	15.17	789243	17.89
021	SAMPLE	215159-002	999407	9.90	1554208	11.04	1439618	15.17	782459	17.89
022	SAMPLE	215159-003	984361	9.90	1537869	11.04	1426682	15.17	771893	17.89
023	SAMPLE	215159-005	979714	9.90	1532226	11.04	1422089	15.17	769813	17.89
024	SAMPLE	215159-006	961287	9.90	1518958	11.04	1406446	15.17	762125	17.89
025	SAMPLE	215159-007	948143	9.90	1501722	11.04	1396702	15.17	753083	17.89
026	SAMPLE	215159-008	942920	9.90	1486883	11.04	1376450	15.17	741156	17.89
027	SAMPLE	215159-010	952777	9.90	1507843	11.04	1398625	15.17	749717	17.89
028	SAMPLE	215173-001	934736	9.90	1480587	11.04	1374782	15.17	730990	17.89
029	SAMPLE	215173-002	934090	9.90	1477209	11.04	1373373	15.17	732745	17.89
030	SAMPLE	215173-003	917323	9.90	1459069	11.04	1354247	15.17	727914	17.89
031	SAMPLE	215159-004	915636	9.90	1454543	11.04	1348489	15.17	732691	17.89
032	SAMPLE	215159-009	901080	9.90	1434848	11.04	1331826	15.17	714351	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839393591

Date : 09/30/09 Reference : kif12
Sequence : MSVOA11 kiu Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
011	CCV/LCS	QC514336	1727388	10.81	3007676	11.74	3083930	14.82	1072157	17.10
013	BLANK	QC514337	1616476	10.81	2902684	11.74	2965899	14.82	877907	17.10
014	SAMPLE	215010-011	1535433	10.81	2765732	11.74	2839069	14.82	833669	17.10
015	SAMPLE	215063-008	1524607	10.81	2759955	11.74	2827380	14.83	845729	17.10
016	SAMPLE	215063-009	1481004	10.81	2654320	11.74	2753660	14.83	855562	17.10
017	SAMPLE	215063-010	1438519	10.82	2598057	11.74	2681890	14.82	833617	17.10
018	SAMPLE	215030-001	1414639	10.81	2577922	11.74	2663136	14.83	792849	17.10
019	SAMPLE	215031-002	1363862	10.81	2505743	11.74	2624360	14.82	807770	17.10
020	SAMPLE	215031-001	1354832	10.81	2488331	11.74	2593576	14.82	784287	17.10
021	SAMPLE	215032-001	1337261	10.81	2471204	11.74	2584855	14.82	772916	17.10
022	SAMPLE	215010-009	1294835	10.81	2386534	11.74	2519583	14.82	805600	17.10
023	SAMPLE	215031-001	1312140	10.81	2406978	11.74	2543996	14.82	793702	17.10
024	SAMPLE	215072-001	1275963	10.81	2368883	11.74	2492201	14.82	786162	17.10
025	SAMPLE	215064-001	1276629	10.81	2353291	11.74	2516479	14.82	810167	17.10
026	SAMPLE	215064-002	1292449	10.82	2385988	11.74	2536468	14.83	756692	17.10
027	SAMPLE	215064-003	1289627	10.82	2381981	11.74	2508312	14.82	778745	17.10
028	SAMPLE	215064-004	1262016	10.81	2327612	11.74	2507022	14.82	804619	17.10
029	MSS	215064-005	1462134	10.81	2629954	11.74	2846614	14.82	931779	17.10
030	SAMPLE	215064-006	1738074	10.81	3083472	11.74	3251245	14.83	1059152	17.10
031	SAMPLE	215064-007	1723707	10.81	3062601	11.74	3216630	14.83	981260	17.10
032	SAMPLE	215064-008	1657110	10.82	2947441	11.74	3096470	14.83	966559	17.10
033	SAMPLE	215064-009	1558594	10.81	2788777	11.74	2939638	14.82	870385	17.10
034	MS	QC514399	1538208	10.81	2781765	11.74	2939831	14.82	1086195	17.10
035	MSD	QC514400	1700259	10.81	3011334	11.74	3243805	14.82	1275926	17.10
040	SAMPLE	215294-004	1507277	10.81	2716318	11.74	2845909	14.82	908841	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469393599

Instrument : MSVOA07 Begun : 09/30/09 07:59
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	giu01	X	IB			09/30/09 07:59	1.0	1	
002	giu02	X	IB			09/30/09 08:36	1.0	1	
003	giu03	X	IB			09/30/09 09:07	1.0	1	
004	giu04	X	BFB			09/30/09 09:55	1.0	2	
005	giu05	X	BFB			09/30/09 10:09	1.0	2	
006	giu06	TUN	BFB			09/30/09 10:27	1.0	2	
007	giu07	IB	CALIB IB			09/30/09 10:39	1.0	1	
008	giu08	ICAL	.25/.5PPB			09/30/09 11:10	1.0	3 4 5 6 1	
009	giu09	ICAL	0.5/1PPB			09/30/09 11:40	1.0	3 4 5 6 1	
010	giu10	ICAL	2PPB			09/30/09 12:11	1.0	3 4 5 6 1	
011	giu11	ICAL	5PPB			09/30/09 12:41	1.0	3 4 5 6 1	
012	giu12	ICAL	10PPB			09/30/09 13:12	1.0	3 4 5 6 1	
013	giu13	ICAL	20PPB			09/30/09 13:43	1.0	7 8 9 10 1	
014	giu14	ICAL	50PPB			09/30/09 14:13	1.0	7 8 9 10 1	
015	giu15	X	75PPB			09/30/09 14:44	1.0	7 8 9 10 1	
016	giu16	ICAL	100PPB			09/30/09 15:15	1.0	7 8 9 10 1	
017	giu17	X	25PPB			09/30/09 15:45	1.0	11 1	
018	giu18	X	25PPB			09/30/09 16:16	1.0	12 13 14 1	
019	giu19	X	IB			09/30/09 17:08	1.0	1	
020	giu20	ICAL	75PPB			09/30/09 17:48	1.0	7 8 9 10 1	
021	giu21	X	25PPB			09/30/09 18:31	1.0	11 1	
022	giu22	X	25PPB			09/30/09 19:02	1.0	12 15 14 1	
023	giu23	TUN	BFB			09/30/09 19:47	1.0	2	
024	giu24	CCV				09/30/09 20:13	1.0	7 8 10 9 1	
025	giu25	ICV/LCS	QC514490	Water	155514	09/30/09 20:44	1.0	12 16 15 17 1	
026	giu26	X	IB			09/30/09 21:14	1.0	1	
027	giu27	BLANK	QC514489	Water	155514	09/30/09 21:45	1.0	1	
028	giu28	SAMPLE	215071-001	Water	155514	09/30/09 22:16	1.0	1	
029	giu29	SAMPLE	215071-010	Water	155514	09/30/09 22:46	1.0	1	headspace <= 1 mL
030	giu30	SAMPLE	215010-010	Water	155514	09/30/09 23:17	1.0	1	
031	giu31	SAMPLE	215072-012	Water	155514	09/30/09 23:48	1.0	1	
032	giu32	SAMPLE	215071-002	Water	155514	10/01/09 00:18	1.0	1	
033	giu33	SAMPLE	215071-003	Water	155514	10/01/09 00:49	1.0	1	
034	giu34	SAMPLE	215071-004	Water	155514	10/01/09 01:20	1.0	1	
035	giu35	SAMPLE	215071-005	Water	155514	10/01/09 01:50	1.0	1	
036	giu36	SAMPLE	215071-007	Water	155514	10/01/09 02:21	1.0	1	headspace <= 1 mL
037	giu37	SAMPLE	215071-011	Water	155514	10/01/09 02:52	1.0	1	
038	giu38	SAMPLE	215071-012	Water	155514	10/01/09 03:22	1.0	1	
039	giu39	SAMPLE	215178-001	Water	155514	10/01/09 03:53	1.0	1	
040	giu40	SAMPLE	215178-002	Water	155514	10/01/09 04:24	1.0	1	2:ISOPROH=5300
041	giu41	SAMPLE	215178-003	Water	155514	10/01/09 04:55	1.0	1	
042	giu42	SAMPLE	215071-006	Water	155514	10/01/09 05:25	4.0	1	
043	giu43	MSS	215071-013	Water	155514	10/01/09 05:56	4.0	1	
044	giu44	SAMPLE	215071-008	Water	155514	10/01/09 06:27	50.0	1	
045	giu45	MS	QC514491	Water	155514	10/01/09 06:57	4.0	12 16 15 17 1	
046	giu46	MSD	QC514492	Water	155514	10/01/09 07:28	4.0	12 16 15 17 1	
047	giu47	X	IB			10/01/09 07:59	1.0	1	
048	giu48	X	IB			10/01/09 08:30	1.0	1	
049	giu49	X	IB			10/01/09 09:00	1.0	1	

TEW 09/30/09 : Tune was adjusted by BO prior to file giu06.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469393599

Instrument : MSVOA07 Begun : 09/30/09 07:59
Method : EPA 8260B SOP Version : TVH_8260B_rv0

TEW 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

TEW 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 23 through 49.

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S12921 2=S12404 3=S13034 4=S13036 5=S13035 6=S13033 7=S12998 8=S13032 9=S12565 10=S12929 11=S12924 12=S12996 13=S129693 14=S12845 15=S12693 16=S13055 17=S12925

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469395137

Instrument : MSVOA07 Begun : 10/01/09 09:37
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	gj101	TUN	BFB			10/01/09 09:37	1.0	1	
002	gj102	X				10/01/09 10:03	1.0	2 3 4 5 6	
003	gj103	CCV				10/01/09 10:46	1.0	7 8 9 10 6	
004	gj104	X	QC514566	Water	155528	10/01/09 11:17	1.0	7 8 9 10 6	
005	gj105	X	IB			10/01/09 11:47	1.0	6	
006	gj106	BLANK	QC514564	Water	155528	10/01/09 12:18	1.0	6	
007	gj107	SAMPLE	215064-004	Water	155528	10/01/09 12:49	1.0	6	
008	gj108	SAMPLE	215064-005	Water	155528	10/01/09 13:19	1.0	6	
009	gj109	SAMPLE	215072-007	Water	155528	10/01/09 13:57	3.333	6	
010	gj110	SAMPLE	215072-006	Water	155528	10/01/09 14:28	5.0	6	
011	gj111	TUN	BFB			10/01/09 15:05	1.0	1	
012	gj112	X				10/01/09 15:30	1.0	2 3 4 5 6	
013	gj113	CCV/BS	QC514565	Water	155528	10/01/09 16:14	1.0	7 8 9 10 6	
014	gj114	BSD	QC514566	Water	155528	10/01/09 16:44	1.0	7 8 9 10 6	
015	gj115	X	IB			10/01/09 17:27	1.0	6	
016	gj116	BLANK	QC514686	Water	155528	10/01/09 17:58	1.0	6	
017	gj117	SAMPLE	215097-002	Water	155528	10/01/09 18:28	1.0	6	headspace <= 1 mL
018	gj118	SAMPLE	215159-011	Water	155528	10/01/09 18:59	1.0	6	
019	gj119	SAMPLE	215071-013	Water	155528	10/01/09 19:30	1.0	6	
020	gj120	SAMPLE	215159-001	Water	155528	10/01/09 20:01	1.0	6	
021	gj121	SAMPLE	215159-002	Water	155528	10/01/09 20:31	1.0	6	
022	gj122	SAMPLE	215159-003	Water	155528	10/01/09 21:02	1.0	6	
023	gj123	SAMPLE	215159-005	Water	155528	10/01/09 21:32	1.0	6	
024	gj124	SAMPLE	215159-006	Water	155528	10/01/09 22:03	1.0	6	
025	gj125	SAMPLE	215159-007	Water	155528	10/01/09 22:34	1.0	6	
026	gj126	SAMPLE	215159-008	Water	155528	10/01/09 23:05	1.0	6	
027	gj127	SAMPLE	215159-010	Water	155528	10/01/09 23:35	1.0	6	
028	gj128	SAMPLE	215173-001	Water	155528	10/02/09 00:06	1.0	6	
029	gj129	SAMPLE	215173-002	Water	155528	10/02/09 00:37	1.0	6	
030	gj130	SAMPLE	215173-003	Water	155528	10/02/09 01:07	1.0	6	
031	gj131	SAMPLE	215159-004	Water	155528	10/02/09 01:38	3.333	6	
032	gj132	SAMPLE	215159-009	Water	155528	10/02/09 02:09	5.0	6	
033	gj133	X	IB			10/02/09 02:40	1.0	6	
034	gj134	X	IB			10/02/09 03:10	1.0	6	
035	gj135	X	IB			10/02/09 03:41	1.0	6	

TEW 10/01/09 : Different aliquot of S12996 used for second set of BS/BSD.

DNT 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 35.

DNT 10/02/09 : Matrix spikes were not performed for this analysis in batch 155528 due to insufficient sample amount.

Analyst: DNT Date: 10/02/09 Reviewer: LW Date: 10/02/09

Standards used: 1=S12404 2=S12998 3=S13032 4=S12929 5=S12565 6=S12921 7=S12996 8=S13055 9=S12693 10=S12925

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839393591

Instrument : MSVOA11 Begun : 09/30/09 07:51
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kiu01	X	IB			09/30/09 07:51	1.0	1	
002	kiu02	X	BFB			09/30/09 08:15	1.0	2	
003	kiu03	X	QC514336	Water	155470	09/30/09 08:28	1.0	3 4 5 6 1	
004	kiu04	X	BFB			09/30/09 09:00	1.0	2	
005	kiu05	X	QC514336	Water	155470	09/30/09 09:13	1.0	3 4 5 6 1	
006	kiu06	X	BFB			09/30/09 09:49	1.0	2	
007	kiu07	X	QC514336	Water	155470	09/30/09 10:18	1.0	3 4 5 6 1	
008	kiu08	X	BFB			09/30/09 11:05	1.0	2	
009	kiu09	X	QC514336	Water	155470	09/30/09 11:17	1.0	3 4 5 6 1	
010	kiu10	TUN	BFB			09/30/09 11:44	1.0	2	
011	kiu11	CCV/LCS	QC514336	Water	155470	09/30/09 11:57	1.0	3 4 5 6 1	
012	kiu12	X	IB			09/30/09 12:25	1.0	1	
013	kiu13	BLANK	QC514337	Water	155470	09/30/09 12:54	1.0	1	
014	kiu14	SAMPLE	215010-011	Water	155470	09/30/09 13:22	1.0	1	
015	kiu15	SAMPLE	215063-008	Water	155470	09/30/09 13:50	1.0	1	
016	kiu16	SAMPLE	215063-009	Water	155470	09/30/09 14:19	1.0	1	
017	kiu17	SAMPLE	215063-010	Water	155470	09/30/09 14:47	1.0	1	
018	kiu18	SAMPLE	215030-001	Water	155470	09/30/09 15:15	1.0	1	pH > 2
019	kiu19	SAMPLE	215031-002	Water	155470	09/30/09 15:43	1.0	1	pH > 2
020	kiu20	SAMPLE	215031-001	Water	155470	09/30/09 16:12	4.0	1	pH > 2, 1:TCE=110
021	kiu21	SAMPLE	215032-001	Water	155470	09/30/09 16:40	25.0	1	pH > 2
022	kiu22	SAMPLE	215010-009	Water	155470	09/30/09 17:08	1.0	1	
023	kiu23	SAMPLE	215031-001	Water	155470	09/30/09 17:37	7.143	1	pH > 2
024	kiu24	SAMPLE	215072-001	Water	155470	09/30/09 18:05	1.0	1	headspace <= 1 mL
025	kiu25	SAMPLE	215064-001	Water	155470	09/30/09 18:33	1.0	1	
026	kiu26	SAMPLE	215064-002	Water	155470	09/30/09 19:01	1.0	1	
027	kiu27	SAMPLE	215064-003	Water	155470	09/30/09 19:30	1.0	1	
028	kiu28	SAMPLE	215064-004	Water	155470	09/30/09 19:58	1.0	1	
029	kiu29	MSS	215064-005	Water	155470	09/30/09 20:26	1.0	1	
030	kiu30	SAMPLE	215064-006	Water	155470	09/30/09 20:54	1.0	1	
031	kiu31	SAMPLE	215064-007	Water	155470	09/30/09 21:23	1.0	1	
032	kiu32	SAMPLE	215064-008	Water	155470	09/30/09 21:51	1.0	1	
033	kiu33	SAMPLE	215064-009	Water	155470	09/30/09 22:19	1.0	1	
034	kiu34	MS	QC514399	Water	155470	09/30/09 22:47	1.0	1 3 4 5 6	
035	kiu35	MSD	QC514400	Water	155470	09/30/09 23:16	1.0	1 3 4 5 6	
036	kiu36	X	IB			09/30/09 23:44	1.0	1	
037	kiu37	X	IB			10/01/09 00:12	1.0	1	
038	kiu38	X	IB			10/01/09 00:41	1.0	1	
039	kiu39	X	IB			10/01/09 01:09	1.0	1	
040	kiu40	SAMPLE	215294-004	Water	155486	10/01/09 01:37	1.0	1	

BO 09/30/09 : kiu04, kiu06, kiu08, kiu10, adjusted tune

DNT 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 40.

Analyst: DNT Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S12947 2=S12404 3=S12996 4=S12845 5=S12693 6=S12924

Page 1 of 1

GC/MS VOLATILE ORGANICS

Batch #: 155470

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215063-8	B	<2				11	mn 1x, Acc 1cv &	2cè 9/30/09
2	215072-1	A		5mL				TB 1mL HJ	
3	215064-1							1x	
4	-2								
5	-3								
6	-4								
7	-5							MSS	
8	-6								
9	-7								
10	-8								
11	-9								
12	-5	BCD	<2					MS/MSD	
13	215063-9*	A						1x hold 9/30	
14	-10*							1x	
15	215030-1*	B	7					1x	
16	215031-1*		7			4		4x	DLT 9/30/09
17	-2*							1x	2cè 9/30/09
18	215032-1*		7			6		25x	DLT 9/30/09
19	215010-9	A	<2					1x	2cè 9/30/09
20	-10		—					- DILTOFF	
21	-11*	A	<2					TB hold 9/30	
22	X								
23									
24	215294-4	A	<2				11	old TVH Blank	2cè 9/30/09
25	215031-001	C	6			6	11	RR@7.14x >LR trichloroethene hold 9/30	DLT 9/30/09
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS Batch #: 155528 **Water Sample Prep Sheet**

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215071 ~~-8~~	~~C~~				2	7	RRe ~~20x AD~~ Report 1st run. Hold 10/2	ve 10/1/09
2	↓ -13	B	<2					1x ↓	
3	215072 -6	↓	<2			3		5x ↓ TCE @ 62PPB Hold 10/1	
4	↓ -7	↓	↓			4		3.33x hits w/ CT ↓	
5	~~215071 -7~~	—	—					~~1x Clethane hit w/ CT~~	
6	215064-4	C	<2					RRe 1x ccv↑ w/ hits Hold 10/1	
7	↓ -5	E						↓ 1x ↓	
8	215159-1	D						1x	
9	-2	A							
10	-3	E	↓					↓	
11	-4	D	<2			6		3.33x	
12	-5	A						1x	
13	-6	D							
14	-7	A							
15	-8	↓	↓					↓	
16	-9	E	<2			7		5x FOAM	
17	↓ -10	B						1x	
18	215173-1	E							
19	↓ -2								
20	↓ -3	↓							
21	215159-11	A						↓	
22	215097-2	↓	↓	Bubble <1mL			↓	TB	↓
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 215065
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091609A	215065-001
BC-16-9C1	215065-002
ASE-77B-9C1	215065-003
ASE-77A-9C1	215065-004
PHXA-06-9C1	215065-005
ASE-32A-9C1	215065-006
ASE-85B-9C1	215065-007
PL-526-9C1	215065-008
BC-11B-9C1	215065-009
BC-11A-9C1	215065-010
PL-524-9C1	215065-011

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/02/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215065**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/18/09**
Samples Received:	**09/18/09**

This data package contains sample and QC results for eleven water samples, requested for the above referenced project on 09/18/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
High recoveries were observed for diesel C10-C22 in the MS/MSD for batch 155181; the parent sample was not a project sample, the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 09/09/09 02:42; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for acetone in the ICV analyzed 09/09/09 16:12; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for many analytes in the CCV analyzed 09/28/09 11:51; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for bromomethane in the CCV analyzed 09/29/09 11:51; this analyte met minimum response criteria, and affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for bromomethane in the CCV analyzed 09/30/09 11:33; this analyte met minimum response criteria, and affected data was qualified with "b". High responses were observed for a number of analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recoveries were observed for many analytes in the LCS for batch 155376;

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215065**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/18/09**
Samples Received:	**09/18/09**

Volatile Organics by GC/MS (EPA 8260B):
these analytes were not detected at or above the RL in the associated samples.

Low recoveries were observed for vinyl acetate in the MS/MSD for batch 155376; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High recoveries were observed for many analytes; the associated RPDs were within limits.

High recoveries were observed for many analytes in the BS/BSD for batch 155421; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. High RPD was observed for bromomethane; this analyte was not detected at or above the RL in the associated samples.

High recoveries were observed for a number of analytes in the BS/BSD for batch 155479; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

Low recovery was observed for trichloroethene in the MSD of ASE-73C-9C1 (lab # 215072-003); the BS/BSD were within limits. High recoveries were observed for many analytes in the MS/MSD of ASE-73C-9C1 (lab # 215072-003); the associated RPDs were within limits.

Responses exceeding the instrument's linear range were observed for trichloroethene in the MS/MSD of ASE-73C-9C1 (lab # 215072-003); affected data was qualified with "b".

High surrogate recovery was observed for bromofluorobenzene in the MSD for batch 155376; the parent sample was not a project sample.

No other analytical problems were encountered.

Chain of Custody

215065

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Privileged & Confidential

Site Name:	Sky Harbor	Phase:	
Location of Site:	Phoenix, AZ	Sampling Program	Quarterly UST

Sampling Co.:	H+A	EDD To:	Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)		Sampler:	M. Weise - D. Foehr - J. Yentes
CH2M HILL		PO #	5101516
2625 South Plaza Drive, Suite 300		Analysis Turnaround Time (TAT):	14
Tempe, AZ 85282		Consultant	
Preliminary Data To	Jennifer Peterson, CH2M HILL		
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL		
Hard Copy To	Jennifer Peterson, CH2M HILL	Full Report TAT:	14
Invoice To:	Honeywell/Copy J Peterson		

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
1	BC-16	--	84	TB-091609A	9.16.09	0600	Blkwtr	Water	TB	1	G	N	X														
2	BC-16	--	84	BC-16-9C1		0645	GW	WATER	Reg	3	G	N	X														
3	ASE-77B	--	190	ASE-77B-9C1		0757	GW	WATR	Reg	3	G	N	X														
4	ASE 77A	--	113	ASE-77A-9C1		0827	GW	WATR	Reg	3	G	N	X														
5	PHXA-06	--	138	PHXA-06-9C1		0935	GW	WATR	Reg	4	G	N	X	X													
6	ASE-32A	--	90	ASE-32A-9C1		1010	GW	WATR	Reg	3	G	N	X														
7	ASE-85B	--	162	ASE-85B-9C1		1056	GW	WATR	Reg	3	G	N	X														
8	ASE-85B	--		PL-526-9C1		1106	GW	WATR	Reg	3	G	N	X														
9	BC-11B	--	158	BC-11B-9C1		1220	GW	WATR	Reg	3	G	N	X														
10	BC-11A	--	190	BC-11A-9C1		1354	GW	WATR	Reg	3	G	N	X														
11	BC-11A	--	--	PL-524-9C1		1405	Blkwtr	WATR	EB	3	G	N	X														
12																											

Relinquished by	Company	H+A	Received by	Company	FEDEX	Condition		Custody Seals Intact	
	Date/Time	09/17/09 16:00		Date/Time	09/17/09 16:00	Cooler Temp.			
Relinquished by	Company		Received by	Company	CTL	Condition	GOOD	Custody Seals Intact	YES
	Date/Time			Date/Time	9/18/09	Cooler Temp.	3.4/2.6		

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 215065 Date Received 9/18/09 Number of coolers 2
Client CH2M HILL Project SKY HARBOR

Date Opened 9/18/09 By (print) M. VILLANUEVA (sign) [signature]
Date Logged in 9/21/09 By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) ____ YES NO
   Shipping info FEDEX 7955042676 75 / 8421 9354 3050
2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ NO
   How many 2 Name UNREADABLE Date 9/17/09
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

   ☑ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation:

   Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.4, 2.6

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? ____ YES NO
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ YES NO
10. Are samples in the appropriate containers for indicated tests? ____ YES NO
11. Are sample labels present, in good condition and complete? ____ YES NO
12. Do the sample labels agree with custody papers? ____ YES NO
13. Was sufficient amount of sample sent for tests requested? ____ YES NO
14. Are the samples appropriately preserved? ____ YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
16. Was the client contacted concerning this sample delivery? ____ YES NO
    If YES, Who was called? ____ By ____ Date: ____

COMMENTS
TB 1 VOA w/ BUBBLE

Laboratory Job Number 215065

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	PHXA-06-9C1	Batch#:	155181
Matrix:	Water	Sampled:	09/16/09
Units:	ug/L	Received:	09/18/09
Diln Fac:	1.000	Prepared:	09/22/09

Type: SAMPLE Analyzed: 09/25/09
Lab ID: 215065-005

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Type: BLANK Analyzed: 09/24/09
Lab ID: QC513136

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513137	Batch#:	155181
Matrix:	Water	Prepared:	09/22/09
Units:	ug/L	Analyzed:	09/24/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,651	106	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	116	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	155181
MSS Lab ID:	214921-006	Sampled:	09/09/09
Matrix:	Water	Received:	09/15/09
Units:	ug/L	Prepared:	09/22/09
Diln Fac:	1.000	Analyzed:	09/24/09

Type: MS Lab ID: QC513138

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	4,733	2,500	9,004	171 *	54-120	M1

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Type: MSD Lab ID: QC513139

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	9,258	181 *	54-120	3	31	M1

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	112	50-120	

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	155181
MSS Lab ID:	215005-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Prepared:	09/22/09
Diln Fac:	1.000	Analyzed:	09/25/09

Type: MS Lab ID: QC513140

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	217.8	2,500	2,620	96	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	112	50-120	

Type: MSD Lab ID: QC513141

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,386	87	54-120	9	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513142	Batch#:	155181
Matrix:	Water	Prepared:	09/22/09
Units:	ug/L	Analyzed:	09/24/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,501	100	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215065 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215065 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215065 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869385421003 File : 267a003 Time : 24-SEP-2009 16:38
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26398	1000	1092	mg/L	9	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	30007	50.00	53.42	mg/L	7	15	

TFB 09/25/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: PRW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869385421004 File : 267a004 Time : 24-SEP-2009 17:06
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18834	500.0	519.9	mg/L	4	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	30441	50.00	54.19	mg/L	8	15	

TFB 09/25/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/25/09 Reviewer: PRW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
Seqnum : 869385421016 File : 267a016 Time : 25-SEP-2009 01:04
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26159	250.0	270.5	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	27723	50.00	49.35	mg/L	-1	15	

TFB 09/25/09 : vial check confirms raw data is for dsl_250,s12545

Analyst: TFB Date: 09/25/09 Reviewer: PRW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869385421017 File : 267a017 Time : 25-SEP-2009 01:32
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18932	500.0	522.6	mg/L	5	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31048	50.00	55.27	mg/L	11	15	

TFB 09/25/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/25/09 Reviewer: PRW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
Seqnum : 869385421034 File : 267a034 Time : 25-SEP-2009 09:32
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26767	250.0	276.8	mg/L	11	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28036	50.00	49.91	mg/L	0	15	

TFB 09/25/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215065 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869385421035 File : 267a035 Time : 25-SEP-2009 10:00
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18264	500.0	504.1	mg/L	1	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	30423	50.00	54.16	mg/L	8	15	

Analyst: TFB Date: 09/25/09 Reviewer: EAH Date: 09/25/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813 12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895 23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869385421

Instrument : GC26A Begun : 09/24/09 15:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	267a001	X	IB				09/24/09 15:41	1.0		
002	267a002	X	CMARKER				09/24/09 16:09	1.0	1	
003	267a003	CCV	DSL_1000				09/24/09 16:38	1.0	2	
004	267a004	CCV	MO_500				09/24/09 17:06	1.0	3	
005	267a005	CCV	JP5_250				09/24/09 17:34	1.0	4	
006	267a006	BLANK	QC513136		Water	155181	09/24/09 20:23	1.0		
007	267a007	BLANK	QC513136	S	Water	155181	09/24/09 20:51	1.0		
008	267a008	LCS	QC513137	S	Water	155181	09/24/09 21:19	1.0		
009	267a009	LCS	QC513142	S	Water	155181	09/24/09 21:47	1.0		
010	267a010	MSS	214921-006		Water	155181	09/24/09 22:15	1.0		
011	267a011	MS	QC513138		Water	155181	09/24/09 22:43	1.0		1:BUNKC:12-40=7000
012	267a012	MSD	QC513139		Water	155181	09/24/09 23:11	1.0		1:BUNKC:12-40=7100
013	267a013	MSS	215005-003		Water	155181	09/24/09 23:39	1.0		
014	267a014	MS	QC513140		Water	155181	09/25/09 00:08	1.0		
015	267a015	MSD	QC513141		Water	155181	09/25/09 00:36	1.0		
016	267a016	CCV	DSL_250				09/25/09 01:04	1.0	5	
017	267a017	CCV	MO_500				09/25/09 01:32	1.0	3	
018	267a018	CCV	JP5_250				09/25/09 02:00	1.0	4	
019	267a019	X	CCV				09/25/09 02:28	1.0	6	
020	267a020	X	CCV				09/25/09 02:57	1.0	3	
021	267a021	X	CCV				09/25/09 03:25	1.0	4	
022	267a022	BLANK	QC512557	S	Water	155038	09/25/09 03:53	1.0		
023	267a023	SAMPLE	215005-002		Water	155181	09/25/09 04:20	1.0		
024	267a024	SAMPLE	215005-001		Water	155181	09/25/09 04:49	1.0		
025	267a025	SAMPLE	215033-004		Water	155181	09/25/09 05:17	1.0		
026	267a026	SAMPLE	215033-003		Water	155181	09/25/09 05:45	1.0		
027	267a027	SAMPLE	215033-002		Water	155181	09/25/09 06:13	1.0		
028	267a028	SAMPLE	215033-001		Water	155181	09/25/09 06:41	1.0		
029	267a029	SAMPLE	215065-005		Water	155181	09/25/09 07:09	1.0		
030	267a030	X	IB				09/25/09 07:37	1.0		
031	267a031	SAMPLE	214873-001	S	Water	155038	09/25/09 08:05	1.0		
032	267a032	SAMPLE	214873-002	S	Water	155038	09/25/09 08:33	1.0		
033	267a033	X	CMARKER				09/25/09 09:01	1.0	1	
034	267a034	CCV	DSL_250				09/25/09 09:32	1.0	5	
035	267a035	CCV	MO_500				09/25/09 10:00	1.0	3	
036	267a036	CCV	JP5_250				09/25/09 10:28	1.0	4	
037	267a037	SAMPLE	214851-017		Water	155075	09/25/09 10:57	1.0		
038	267a038	SAMPLE	214851-016		Water	155075	09/25/09 11:25	1.0		
039	267a039	SAMPLE	214851-014		Water	155075	09/25/09 11:53	1.0		
040	267a040	SAMPLE	214851-015		Water	155075	09/25/09 12:22	1.0		
041	267a041	SAMPLE	214881-001		Water	155075	09/25/09 12:50	1.0		
042	267a042	CCV	DSL_1000				09/25/09 13:18	1.0	2	
043	267a043	CCV	MO_500				09/25/09 13:46	1.0	3	
044	267a044	CCV	JP5_250				09/25/09 14:20	1.0	4	
045	267a045	SAMPLE	214876-012	S	Water	155038	09/25/09 15:10	1.0		
046	267a046	SAMPLE	214876-013	S	Water	155038	09/25/09 15:38	1.0		
047	267a047	SAMPLE	214876-011	S	Water	155038	09/25/09 16:06	1.0		
048	267a048	SAMPLE	214876-005	S	Water	154968	09/25/09 16:35	1.0		
049	267a049	SAMPLE	214876-006	S	Water	154968	09/25/09 17:03	1.0		
050	267a050	SAMPLE	214876-007	S	Water	154968	09/25/09 17:31	1.0		
051	267a051	SAMPLE	214876-008	S	Water	154968	09/25/09 17:59	1.0		
052	267a052	SAMPLE	214876-009	S	Water	154968	09/25/09 18:28	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869385421

Instrument : GC26A Begun : 09/24/09 15:41
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	267a053	MSS	214877-009	S	Water	155038	09/25/09 18:56	1.0		
054	267a054	SAMPLE	214877-010	S	Water	155038	09/25/09 19:25	1.0		
055	267a055	X	CMARKER				09/25/09 19:53	1.0	1	
056	267a056	CCV	DSL_500				09/25/09 20:22	1.0	6	
057	267a057	CCV	MO_500				09/25/09 20:50	1.0	3	
058	267a058	CCV	JP5_250				09/25/09 21:18	1.0	4	
059	267a059	X	CCV				09/25/09 21:46	1.0	6	
060	267a060	X	CCV				09/25/09 22:14	1.0	3	
061	267a061	X	CCV				09/25/09 22:42	1.0	4	
062	267a062	SAMPLE	214877-011	S	Water	155038	09/25/09 23:10	1.0		
063	267a063	SAMPLE	214877-012	S	Water	155038	09/25/09 23:39	1.0		
064	267a064	SAMPLE	214877-001	S	Water	154968	09/26/09 00:07	1.0		
065	267a065	SAMPLE	214877-002	S	Water	154968	09/26/09 00:35	1.0		
066	267a066	SAMPLE	214877-003	S	Water	154968	09/26/09 01:03	1.0		
067	267a067	SAMPLE	214877-004	S	Water	154968	09/26/09 01:31	1.0		
068	267a068	SAMPLE	214877-005	S	Water	154968	09/26/09 01:59	1.0		
069	267a069	SAMPLE	214877-006	S	Water	154968	09/26/09 02:27	1.0		
070	267a070	SAMPLE	214877-007	S	Water	154968	09/26/09 02:55	1.0		
071	267a071	SAMPLE	214877-008	S	Water	154968	09/26/09 03:24	1.0		
072	267a072	CCV	DSL_1000				09/26/09 03:52	1.0	2	
073	267a073	X	MO_500				09/26/09 04:21	1.0	3	
074	267a074	CCV	JP5_250				09/26/09 04:50	1.0	4	
075	267a075	X	CCV				09/26/09 05:18	1.0	2	
076	267a076	CCV	MO				09/26/09 05:47	1.0	3	
077	267a077	X	CCV				09/26/09 06:15	1.0	4	

TFB 09/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 43.

JDG 09/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 44 through 77.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12969 5=S12545 6=S12546

SAMPLE PREPARATION SUMMARY

Batch # : 155181
Started By : DJT
Method : 3520C
Spike #1 ID : S12934

Prep Date : 22-SEP-2009 17:20
SOP Version : TEH_3520_rv12
Spike #2 ID : S12972

Analysis : TEH
Finished By : NAV
Units : mL
Spike #3 ID : S12290

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
214811-001		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-002		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-003		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-004		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-005		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-006		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-007		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214811-008		Water	500	2.5	1	0.005		.5			3630C	TEHM	
214921-006		Water	1000	5	1	0.005		1				TEH	See comment 1 below
215005-001		Water	1000	5	1	0.005		1				TEHM	
215005-002		Water	1000	5	1	0.005		1				TEHM	
215005-003		Water	1000	5	1	0.005		1				TEHM	mss
215029-001		Water	500	2.5	1	0.005		.5			3630C	TEH	
215029-002		Water	500	2.5	1	0.005		.5			3630C	TEH	
215029-003		Water	500	2.5	1	0.005		.5			3630C	TEH	
215033-001		Water	500	2.5	1	0.005		.5				TEHM	
215033-002		Water	500	2.5	1	0.005		.5				TEHM	
215033-003		Water	500	2.5	1	0.005		.5				TEHM	
215033-004		Water	500	2.5	1	0.005		.5				TEHM	
215065-005		Water	500	2.5	1	0.005		.5				TEHM	
QC513136	BLANK	Water	1000	5	1	0.005		1			3630C		
QC513137	LCS	Water	1000	5	1	0.005		1	1		3630C		
QC513138	MS	Water	1000	5	1	0.005		1	1				
QC513139	MSD	Water	1000	5	1	0.005		1	1				
QC513140	MS	Water	1000	5	1	0.005		1	1				
QC513141	MSD	Water	1000	5	1	0.005		1	1				
QC513142	LCS	Water	1000	5	1	0.005		1		1			

Comment 1: mss(comp 002c-005c @250mL each)

Analyst: TFB Date: 09/25/09 Reviewer: PRW Date: 09/25/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 155181
LIMS Analysis: TEHM
Date Extracted: 9/22/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
214811-001	D	500	7	2.5	X	
002						
003	H					
004						
005	D					
006						
007	K		5			
008						
* 214921-006	COMP	1000	7	5.0		MSS COMP 002c-005c @250mL EACH
215005-001	B					
002						
003						MSS
215029-001	F	500		2.5	X	
002						
003						
215033-001	E					
002						
003						
004						
215065-005	D					
* MB QC53136	NA	1000	NA	5.0	X	
LCS 7						
MS 8	COMP		7			214921-006
MSD 9						

	Mfg & Lot# / LIMS # / Time	Date/ Initials
1.0*/0.5 mL of TEH_SURR was added to all samples	S12934A	DDC 9/22/09
1.0 mL of TEH_SP was added to all spikes	S12972A/S12290C^A	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS093334	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM49182	
Extraction Start Time:	1720	
Extraction End Time:	1126	DDC 9/23/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	NAV 9/23/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49007919	
Concentrated to final volume at temperature (degrees C)	100	
Relinquished to TEH Department	✓	

9/22/09
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

TFB 9/24/09
Reviewed by **Date**

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 155181

LIMS Analysis: TEHM

Date Extracted: 9/22/09

Extraction Method:

☐ mod. EPA 3510c sep. funnel

☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):

☒ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
*MS QC513140	D	1000	7	5.0		215005-003
MSD ↓ 1	E	↓	↓	↓		↓
LCS ↓ 2	NA	↓	NA	↓		Δ

	Mfg & Lot# / LIMS # / Time	Date/ Initials
— mL of TEH_SURR was added to all samples	SEE PREVIOUS	DJT 9/22/09
— mL of TEH_SP was added to all spikes	↓	↓
pH of all samples adjusted to pH ≤ 2 with H_2SO_4		
☐ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2		
Extraction Start Time:		
Extraction End Time:		
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2		
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4		
Concentrated to final volume at temperature (degrees C)		
Relinquished to TEH Department	↓	↓

[signature] 9/22/09

Extraction Chemist **Date**

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Continued on Page —

TFB 9/24/09

Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KKM
Cleanup Date: 9/24/09

Benchbook # **BK 2939**
Page 20

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
214811.001	155161	1.0	1.0	
002				
003				
004				
005				
006				
007				
008				
215029.001				
002				
003				
MB QCS13136				
LCS 7				

☐ Extracts were cleaned up using C&T assembled — g columns
☑ Extracts were cleaned up using 1.0 g cartridges
Extracts were eluted with 4.0 mL CH_2Cl_2
Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	KKM 9/24/09
SP11910	
5MB49182	

KKM 9/24/09
Extraction Chemist / Date

Continued from page _____
Continued on page _____

TFB 9/24/09
Reviewed by / Date

Laboratory Job Number 215065

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091609A	Batch#:	155376
Lab ID:	215065-001	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	L1 V1
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091609A	Batch#:	155376
Lab ID:	215065-001	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	L1 V1
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-16-9C1	Batch#:	155376
Lab ID:	215065-002	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	L1 V1
1,1-Dichloroethene	0.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	2.3	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.6	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	14	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.7	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-16-9C1	Batch#:	155376
Lab ID:	215065-002	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	L1 V1
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	114	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-77B-9C1	Batch#:	155376
Lab ID:	215065-003	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	L1 V1
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	6.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-77B-9C1	Batch#:	155376
Lab ID:	215065-003	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	L1 V1
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	115	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	106	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-77A-9C1	Batch#:	155376
Lab ID:	215065-004	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	L1 V1
1,1-Dichloroethene	3.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.5	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	2.7	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	7.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.2	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-77A-9C1	Batch#:	155376
Lab ID:	215065-004	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	L1 V1
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	116	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	105	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PHXA-06-9C1	Batch#:	155421
Lab ID:	215065-005	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	2.0	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	1.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.9	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PHXA-06-9C1	Batch#:	155421
Lab ID:	215065-005	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	114	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-32A-9C1	Batch#:	155421
Lab ID:	215065-006	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	4.6	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	7.6	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	5.5	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	1.0	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	24	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.1	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-32A-9C1	Batch#:	155421
Lab ID:	215065-006	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-85B-9C1	Batch#:	155479
Lab ID:	215065-007	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D1
Chloromethane	ND	2.0	D1
Vinyl Chloride	ND	1.0	D1
Bromomethane	ND	2.0	D1 V9
Chloroethane	ND	2.0	D1
Trichlorofluoromethane	ND	2.0	D1
Iodomethane	ND	20	D1
Acetone	ND	20	D1
1,1-Dichloroethene	14	1.0	D1
Methylene Chloride	ND	20	D1
Carbon Disulfide	ND	1.0	D1
MTBE	ND	1.0	D1
trans-1,2-Dichloroethene	ND	1.0	D1
Vinyl Acetate	ND	20	D1 L1 R2 V1
1,1-Dichloroethane	9.3	1.0	D1
2-Butanone	ND	20	D1
cis-1,2-Dichloroethene	17	1.0	D1
2,2-Dichloropropane	ND	1.0	D1 L1 V1
Chloroform	1.0	1.0	D1
Bromochloromethane	ND	1.0	D1
1,1,1-Trichloroethane	ND	1.0	D1
1,1-Dichloropropene	ND	1.0	D1
Carbon Tetrachloride	ND	1.0	D1 L1
1,2-Dichloroethane	ND	1.0	D1
Benzene	ND	1.0	D1
Trichloroethene	89	1.0	D1
1,2-Dichloropropane	ND	1.0	D1
Bromodichloromethane	ND	1.0	D1
Dibromomethane	ND	1.0	D1
4-Methyl-2-Pentanone	ND	20	D1
cis-1,3-Dichloropropene	ND	1.0	D1
Toluene	ND	1.0	D1
trans-1,3-Dichloropropene	ND	1.0	D1
1,1,2-Trichloroethane	ND	1.0	D1
2-Hexanone	ND	20	D1
1,3-Dichloropropane	ND	1.0	D1
Tetrachloroethene	1.5	1.0	D1

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-85B-9C1	Batch#:	155479
Lab ID:	215065-007	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D1
1,2-Dibromoethane	ND	1.0	D1
Chlorobenzene	ND	1.0	D1
1,1,1,2-Tetrachloroethane	ND	1.0	D1
Ethylbenzene	ND	1.0	D1
m,p-Xylenes	ND	1.0	D1
o-Xylene	ND	1.0	D1
Styrene	ND	1.0	D1
Bromoform	ND	2.0	D1
Isopropylbenzene	ND	1.0	D1
1,1,2,2-Tetrachloroethane	ND	1.0	D1
1,2,3-Trichloropropane	ND	1.0	D1
Propylbenzene	ND	1.0	D1
Bromobenzene	ND	1.0	D1
1,3,5-Trimethylbenzene	ND	1.0	D1
2-Chlorotoluene	ND	1.0	D1
4-Chlorotoluene	ND	1.0	D1
tert-Butylbenzene	ND	1.0	D1
1,2,4-Trimethylbenzene	ND	1.0	D1
sec-Butylbenzene	ND	1.0	D1 L1 V1
para-Isopropyl Toluene	ND	1.0	D1
1,3-Dichlorobenzene	ND	1.0	D1
1,4-Dichlorobenzene	ND	1.0	D1
n-Butylbenzene	ND	1.0	D1 L1 V1
1,2-Dichlorobenzene	ND	1.0	D1
1,2-Dibromo-3-Chloropropane	ND	4.0	D1
1,2,4-Trichlorobenzene	ND	1.0	D1
Hexachlorobutadiene	ND	4.0	D1
Naphthalene	ND	4.0	D1
1,2,3-Trichlorobenzene	ND	1.0	D1
Xylene (total)	ND	1.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	108	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-526-9C1	Units:	ug/L
Lab ID:	215065-008	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	1.000	155421	09/29/09	V1
Chloromethane	ND	1.0	1.000	155421	09/29/09	
Vinyl Chloride	ND	0.5	1.000	155421	09/29/09	
Bromomethane	ND	1.0	1.000	155421	09/29/09	R7 V9
Chloroethane	ND	1.0	1.000	155421	09/29/09	
Trichlorofluoromethane	ND	1.0	1.000	155421	09/29/09	V1
Iodomethane	ND	10	1.000	155421	09/29/09	
Acetone	ND	10	1.000	155421	09/29/09	
1,1-Dichloroethene	17	0.5	1.000	155421	09/29/09	
Methylene Chloride	ND	10	1.000	155421	09/29/09	
Carbon Disulfide	ND	0.5	1.000	155421	09/29/09	
MTBE	ND	0.5	1.000	155421	09/29/09	
trans-1,2-Dichloroethene	ND	0.5	1.000	155421	09/29/09	
Vinyl Acetate	ND	10	1.000	155421	09/29/09	L1 R2 V1
1,1-Dichloroethane	11	0.5	1.000	155421	09/29/09	
2-Butanone	ND	10	1.000	155421	09/29/09	
cis-1,2-Dichloroethene	20	0.5	1.000	155421	09/29/09	
2,2-Dichloropropane	ND	0.5	1.000	155421	09/29/09	L1 V1
Chloroform	1.0	0.5	1.000	155421	09/29/09	
Bromochloromethane	ND	0.5	1.000	155421	09/29/09	
1,1,1-Trichloroethane	ND	0.5	1.000	155421	09/29/09	L1 V1
1,1-Dichloropropene	ND	0.5	1.000	155421	09/29/09	L1 V1
Carbon Tetrachloride	ND	0.5	1.000	155421	09/29/09	L1 V1
1,2-Dichloroethane	ND	0.5	1.000	155421	09/29/09	
Benzene	0.6	0.5	1.000	155421	09/29/09	
Trichloroethene	95	1.7	3.333	155479	09/30/09	D1
1,2-Dichloropropane	ND	0.5	1.000	155421	09/29/09	
Bromodichloromethane	ND	0.5	1.000	155421	09/29/09	
Dibromomethane	ND	0.5	1.000	155421	09/29/09	
4-Methyl-2-Pentanone	ND	10	1.000	155421	09/29/09	
cis-1,3-Dichloropropene	ND	0.5	1.000	155421	09/29/09	L1 V1
Toluene	ND	0.5	1.000	155421	09/29/09	
trans-1,3-Dichloropropene	ND	0.5	1.000	155421	09/29/09	
1,1,2-Trichloroethane	ND	0.5	1.000	155421	09/29/09	
2-Hexanone	ND	10	1.000	155421	09/29/09	
1,3-Dichloropropane	ND	0.5	1.000	155421	09/29/09	
Tetrachloroethene	1.9	0.5	1.000	155421	09/29/09	
Dibromochloromethane	ND	0.5	1.000	155421	09/29/09	
1,2-Dibromoethane	ND	0.5	1.000	155421	09/29/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-526-9C1	Units:	ug/L
Lab ID:	215065-008	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Chlorobenzene	ND	0.5	1.000	155421	09/29/09	
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	155421	09/29/09	
Ethylbenzene	ND	0.5	1.000	155421	09/29/09	
m,p-Xylenes	ND	0.5	1.000	155421	09/29/09	
o-Xylene	ND	0.5	1.000	155421	09/29/09	
Styrene	ND	0.5	1.000	155421	09/29/09	
Bromoform	ND	1.0	1.000	155421	09/29/09	
Isopropylbenzene	ND	0.5	1.000	155421	09/29/09	
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	155421	09/29/09	L1 V1
1,2,3-Trichloropropane	ND	0.5	1.000	155421	09/29/09	
Propylbenzene	ND	0.5	1.000	155421	09/29/09	
Bromobenzene	ND	0.5	1.000	155421	09/29/09	
1,3,5-Trimethylbenzene	ND	0.5	1.000	155421	09/29/09	
2-Chlorotoluene	ND	0.5	1.000	155421	09/29/09	
4-Chlorotoluene	ND	0.5	1.000	155421	09/29/09	
tert-Butylbenzene	ND	0.5	1.000	155421	09/29/09	
1,2,4-Trimethylbenzene	ND	0.5	1.000	155421	09/29/09	
sec-Butylbenzene	ND	0.5	1.000	155421	09/29/09	L1 V1
para-Isopropyl Toluene	ND	0.5	1.000	155421	09/29/09	
1,3-Dichlorobenzene	ND	0.5	1.000	155421	09/29/09	
1,4-Dichlorobenzene	ND	0.5	1.000	155421	09/29/09	
n-Butylbenzene	ND	0.5	1.000	155421	09/29/09	L1 V1
1,2-Dichlorobenzene	ND	0.5	1.000	155421	09/29/09	
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	155421	09/29/09	
1,2,4-Trichlorobenzene	ND	0.5	1.000	155421	09/29/09	
Hexachlorobutadiene	ND	2.0	1.000	155421	09/29/09	V1
Naphthalene	ND	2.0	1.000	155421	09/29/09	
1,2,3-Trichlorobenzene	ND	0.5	1.000	155421	09/29/09	
Xylene (total)	ND	0.5	1.000	155421	09/29/09	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	104	77-120	1.000	155421	09/29/09	
Dibromofluoromethane	103	77-120	3.333	155479	09/30/09	
1,2-Dichloroethane-d4	110	70-127	1.000	155421	09/29/09	
1,2-Dichloroethane-d4	108	70-127	3.333	155479	09/30/09	
Toluene-d8	101	83-125	1.000	155421	09/29/09	
Toluene-d8	102	83-125	3.333	155479	09/30/09	
Bromofluorobenzene	102	78-120	1.000	155421	09/29/09	
Bromofluorobenzene	101	78-120	3.333	155479	09/30/09	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-11B-9C1	Batch#:	155421
Lab ID:	215065-009	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	6.2	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	5.1	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	4.9	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	23	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.7	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-11B-9C1	Batch#:	155421
Lab ID:	215065-009	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-11A-9C1	Batch#:	155479
Lab ID:	215065-010	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D2
Chloromethane	ND	2.0	D2
Vinyl Chloride	ND	1.0	D2
Bromomethane	ND	2.0	D2 V9
Chloroethane	ND	2.0	D2
Trichlorofluoromethane	ND	2.0	D2
Iodomethane	ND	20	D2
Acetone	ND	20	D2
1,1-Dichloroethene	16	1.0	D2
Methylene Chloride	ND	20	D2
Carbon Disulfide	ND	1.0	D2
MTBE	ND	1.0	D2
trans-1,2-Dichloroethene	2.2	1.0	D2
Vinyl Acetate	ND	20	D2 L1 R2 V1
1,1-Dichloroethane	9.0	1.0	D2
2-Butanone	ND	20	D2
cis-1,2-Dichloroethene	35	1.0	D2
2,2-Dichloropropane	ND	1.0	D2 L1 V1
Chloroform	ND	1.0	D2
Bromochloromethane	ND	1.0	D2
1,1,1-Trichloroethane	ND	1.0	D2
1,1-Dichloropropene	ND	1.0	D2
Carbon Tetrachloride	ND	1.0	D2 L1
1,2-Dichloroethane	ND	1.0	D2
Benzene	ND	1.0	D2
Trichloroethene	150	1.0	D2
1,2-Dichloropropane	ND	1.0	D2
Bromodichloromethane	ND	1.0	D2
Dibromomethane	ND	1.0	D2
4-Methyl-2-Pentanone	ND	20	D2
cis-1,3-Dichloropropene	ND	1.0	D2
Toluene	ND	1.0	D2
trans-1,3-Dichloropropene	ND	1.0	D2
1,1,2-Trichloroethane	ND	1.0	D2
2-Hexanone	ND	20	D2
1,3-Dichloropropane	ND	1.0	D2
Tetrachloroethene	ND	1.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-11A-9C1	Batch#:	155479
Lab ID:	215065-010	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D2
1,2-Dibromoethane	ND	1.0	D2
Chlorobenzene	ND	1.0	D2
1,1,1,2-Tetrachloroethane	ND	1.0	D2
Ethylbenzene	ND	1.0	D2
m,p-Xylenes	ND	1.0	D2
o-Xylene	ND	1.0	D2
Styrene	ND	1.0	D2
Bromoform	ND	2.0	D2
Isopropylbenzene	ND	1.0	D2
1,1,2,2-Tetrachloroethane	ND	1.0	D2
1,2,3-Trichloropropane	ND	1.0	D2
Propylbenzene	ND	1.0	D2
Bromobenzene	ND	1.0	D2
1,3,5-Trimethylbenzene	ND	1.0	D2
2-Chlorotoluene	ND	1.0	D2
4-Chlorotoluene	ND	1.0	D2
tert-Butylbenzene	ND	1.0	D2
1,2,4-Trimethylbenzene	ND	1.0	D2
sec-Butylbenzene	ND	1.0	D2 L1 V1
para-Isopropyl Toluene	ND	1.0	D2
1,3-Dichlorobenzene	ND	1.0	D2
1,4-Dichlorobenzene	ND	1.0	D2
n-Butylbenzene	ND	1.0	D2 L1 V1
1,2-Dichlorobenzene	ND	1.0	D2
1,2-Dibromo-3-Chloropropane	ND	4.0	D2
1,2,4-Trichlorobenzene	ND	1.0	D2
Hexachlorobutadiene	ND	4.0	D2
Naphthalene	ND	4.0	D2
1,2,3-Trichlorobenzene	ND	1.0	D2
Xylene (total)	ND	1.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-524-9C1	Batch#:	155421
Lab ID:	215065-011	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-524-9C1	Batch#:	155421
Lab ID:	215065-011	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	114	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513940	Batch#:	155376
Matrix:	Water	Analyzed:	09/28/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	L1 V1
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC513940	Batch#:	155376
Matrix:	Water	Analyzed:	09/28/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	L1 V1
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513941	Batch#:	155376
Matrix:	Water	Analyzed:	09/28/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	30.91 b	124	56-140	V3
Chloromethane	25.00	27.87	111	46-142	
Vinyl Chloride	25.00	28.87	115	49-136	
Bromomethane	25.00	33.37 b	133	42-154	V3
Chloroethane	25.00	29.96	120	51-133	
Trichlorofluoromethane	25.00	29.49	118	63-135	
Iodomethane	25.00	37.51 b	150 *	70-130	L1 V3
Acetone	25.00	33.58 b	134 *	48-130	L1 V3
1,1-Dichloroethene	25.00	28.50	114	68-133	
Methylene Chloride	25.00	28.78	115	71-120	
Carbon Disulfide	25.00	27.08	108	56-120	
MTBE	25.00	28.13	113	58-120	
trans-1,2-Dichloroethene	25.00	30.63 b	123 *	80-120	L1 V3
Vinyl Acetate	25.00	24.70	99	63-124	
1,1-Dichloroethane	25.00	29.64	119	77-120	
2-Butanone	25.00	29.94	120	57-120	
cis-1,2-Dichloroethene	25.00	29.36	117	75-120	
2,2-Dichloropropane	25.00	29.73	119	72-128	
Chloroform	25.00	28.12	112	78-120	
Bromochloromethane	25.00	29.97	120	78-120	
1,1,1-Trichloroethane	25.00	28.85	115	78-120	
1,1-Dichloropropene	25.00	26.26	105	75-120	
Carbon Tetrachloride	25.00	25.20	101	80-120	
1,2-Dichloroethane	25.00	25.35	101	74-120	
Benzene	25.00	27.53	110	77-120	
Trichloroethene	25.00	28.28	113	78-122	
1,2-Dichloropropane	25.00	26.88	108	76-120	
Bromodichloromethane	25.00	27.37	109	78-120	
Dibromomethane	25.00	26.49	106	77-120	
4-Methyl-2-Pentanone	25.00	23.80	95	65-120	
cis-1,3-Dichloropropene	25.00	29.37	117	76-120	
Toluene	25.00	24.77	99	73-120	
trans-1,3-Dichloropropene	25.00	23.48	94	72-120	
1,1,2-Trichloroethane	25.00	25.87	103	76-120	
2-Hexanone	25.00	23.55	94	57-121	
1,3-Dichloropropane	25.00	25.91	104	75-120	
Tetrachloroethene	25.00	23.18	93	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513941	Batch#:	155376
Matrix:	Water	Analyzed:	09/28/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	24.95	100	76-120	
1,2-Dibromoethane	25.00	24.76	99	77-120	
Chlorobenzene	25.00	24.47	98	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.18	97	77-120	
Ethylbenzene	25.00	25.25	101	78-120	
m,p-Xylenes	50.00	48.47	97	77-120	
o-Xylene	25.00	23.51	94	77-120	
Styrene	25.00	24.57	98	77-120	
Bromoform	25.00	22.78	91	74-121	
Isopropylbenzene	25.00	23.77	95	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.56	102	73-120	
1,2,3-Trichloropropane	25.00	30.55 b	122 *	72-120	L1 V3
Propylbenzene	25.00	24.61	98	76-120	
Bromobenzene	25.00	27.02	108	75-120	
1,3,5-Trimethylbenzene	25.00	29.48	118	77-120	
2-Chlorotoluene	25.00	28.23	113	76-120	
4-Chlorotoluene	25.00	26.16	105	78-120	
tert-Butylbenzene	25.00	21.91	88	76-120	
1,2,4-Trimethylbenzene	25.00	30.82 b	123 *	77-120	L1 V3
sec-Butylbenzene	25.00	22.94	92	80-120	
para-Isopropyl Toluene	25.00	26.70	107	76-120	
1,3-Dichlorobenzene	25.00	25.09	100	75-120	
1,4-Dichlorobenzene	25.00	24.34	97	77-120	
n-Butylbenzene	25.00	41.49 b	166 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.52	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	26.60	106	65-120	
1,2,4-Trichlorobenzene	25.00	28.13	113	73-121	
Hexachlorobutadiene	25.00	24.28	97	73-123	
Naphthalene	25.00	31.31 b	125 *	62-121	L1 V3
1,2,3-Trichlorobenzene	25.00	29.66	119	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155376
MSS Lab ID:	215113-006	Sampled:	09/22/09
Matrix:	Water	Received:	09/23/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	100.0		

Type: MS Lab ID: QC513986

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<20.00	2,500	3,334 b	133	56-140	D2 V3
Chloromethane	<20.00	2,500	3,286	131	46-142	D2
Vinyl Chloride	<10.00	2,500	3,236	129	49-136	D2
Bromomethane	<20.00	2,500	3,458 b	138	42-154	D2 V3
Chloroethane	<20.00	2,500	3,188	128	51-133	D2
Trichlorofluoromethane	<20.00	2,500	3,210	128	63-135	D2
Iodomethane	<200.0	2,500	3,948 b	158 *	60-140	D2 M1 V3
Acetone	259.6	2,500	3,579 b	133 *	48-130	D2 M1 V3
1,1-Dichloroethene	<10.00	2,500	3,092	124	68-133	D2
Methylene Chloride	<7.064	2,500	3,004	120	71-120	D2
Carbon Disulfide	<10.00	2,500	2,996	120	56-120	D2
MTBE	<10.00	2,500	2,867	115	58-120	D2
trans-1,2-Dichloroethene	<10.00	2,500	3,251 b	130 *	80-120	D2 M1 V3
Vinyl Acetate	<200.0	2,500	727.0	29 *	63-124	D2 M2
1,1-Dichloroethane	<10.00	2,500	3,225	129 *	77-120	D2 M1
2-Butanone	<200.0	2,500	2,821	113	57-120	D2
cis-1,2-Dichloroethene	<10.00	2,500	3,033	121 *	75-120	D2 M1
2,2-Dichloropropane	<10.00	2,500	3,030	121	72-128	D2
Chloroform	16.39	2,500	3,037	121 *	78-120	D2 M1
Bromochloromethane	<10.00	2,500	3,088	124 *	78-120	D2 M1
1,1,1-Trichloroethane	<11.31	2,500	3,303	132 *	78-120	D2 M1
1,1-Dichloropropene	<10.00	2,500	2,858	114	75-120	D2
Carbon Tetrachloride	<10.00	2,500	2,848	114	80-120	D2
1,2-Dichloroethane	<10.00	2,500	2,704	108	74-120	D2
Benzene	<10.00	2,500	2,847	114	77-120	D2
Trichloroethene	<10.00	2,500	3,210	128 *	78-122	D2 M1
1,2-Dichloropropane	<10.00	2,500	2,756	110	76-120	D2
Bromodichloromethane	<10.00	2,500	2,802	112	78-120	D2
Dibromomethane	<10.00	2,500	2,684	107	77-120	D2
4-Methyl-2-Pentanone	<200.0	2,500	2,333	93	65-120	D2
cis-1,3-Dichloropropene	<10.00	2,500	2,888	116	76-120	D2
Toluene	<10.00	2,500	2,441	98	73-120	D2
trans-1,3-Dichloropropene	<10.00	2,500	2,255	90	72-120	D2
1,1,2-Trichloroethane	<10.75	2,500	2,465	99	76-120	D2
2-Hexanone	<200.0	2,500	1,892	76	57-121	D2
1,3-Dichloropropane	<10.00	2,500	2,532	101	75-120	D2
Tetrachloroethene	<13.16	2,500	2,312	92	77-120	D2
Dibromochloromethane	<10.00	2,500	2,413	97	76-120	D2
1,2-Dibromoethane	<10.00	2,500	2,374	95	77-120	D2
Chlorobenzene	<10.00	2,500	2,389	96	78-120	D2
1,1,1,2-Tetrachloroethane	<10.00	2,500	2,362	94	77-120	D2
Ethylbenzene	<10.00	2,500	2,532	101	78-120	D2
m,p-Xylenes	<15.94	5,000	4,803	96	77-120	D2
o-Xylene	<10.00	2,500	2,298	92	77-120	D2
Styrene	<10.00	2,500	2,324	93	77-120	D2
Bromoform	<20.00	2,500	2,155	86	74-121	D2
Isopropylbenzene	<10.00	2,500	2,284	91	71-120	D2
1,1,2,2-Tetrachloroethane	<10.00	2,500	2,039	82	73-120	D2

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155376
MSS Lab ID:	215113-006	Sampled:	09/22/09
Matrix:	Water	Received:	09/23/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	100.0		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<10.70	2,500	2,881 b	115	72-120	D2 V3
Propylbenzene	<10.00	2,500	2,393	96	76-120	D2
Bromobenzene	<10.00	2,500	2,512	100	75-120	D2
1,3,5-Trimethylbenzene	<10.00	2,500	2,929	117	77-120	D2
2-Chlorotoluene	<10.00	2,500	2,718	109	76-120	D2
4-Chlorotoluene	<10.00	2,500	2,503	100	78-120	D2
tert-Butylbenzene	<10.00	2,500	2,136	85	76-120	D2
1,2,4-Trimethylbenzene	<10.00	2,500	3,069 b	123 *	77-120	D2 M1 V3
sec-Butylbenzene	<10.29	2,500	2,263	91	80-120	D2
para-Isopropyl Toluene	<10.00	2,500	2,677	107	76-120	D2
1,3-Dichlorobenzene	<10.00	2,500	2,379	95	75-120	D2
1,4-Dichlorobenzene	<10.00	2,500	2,315	93	77-120	D2
n-Butylbenzene	<12.85	2,500	4,135 b	165 *	76-120	D2 M1 V3
1,2-Dichlorobenzene	<10.00	2,500	2,424	97	76-120	D2
1,2-Dibromo-3-Chloropropane	<40.00	2,500	2,394	96	65-120	D2
1,2,4-Trichlorobenzene	<13.29	2,500	2,587	103	73-121	D2
Hexachlorobutadiene	<40.00	2,500	2,356	94	73-123	D2
Naphthalene	<40.00	2,500	2,896 b	116	62-121	D2 V3
1,2,3-Trichlorobenzene	<11.49	2,500	2,750	110	66-123	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	114	77-120	
1,2-Dichloroethane-d4	106	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	111	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155376
MSS Lab ID:	215113-006	Sampled:	09/22/09
Matrix:	Water	Received:	09/23/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	100.0		

Type: MSD Lab ID: QC513987

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	2,500	3,300 b	132	56-140	1	24	D2 V3
Chloromethane	2,500	3,248	130	46-142	1	24	D2
Vinyl Chloride	2,500	3,236	129	49-136	0	24	D2
Bromomethane	2,500	3,554 b	142	42-154	3	24	D2 V3
Chloroethane	2,500	3,118	125	51-133	2	25	D2
Trichlorofluoromethane	2,500	3,078	123	63-135	4	20	D2
Iodomethane	2,500	4,111 b	164 *	60-140	4	30	D2 M1 V3
Acetone	2,500	4,288 b	161 *	48-130	18	41	D2 M1 V3
1,1-Dichloroethene	2,500	3,055	122	68-133	1	20	D2
Methylene Chloride	2,500	2,940	118	71-120	2	20	D2
Carbon Disulfide	2,500	2,897	116	56-120	3	20	D2
MTBE	2,500	2,847	114	58-120	1	21	D2
trans-1,2-Dichloroethene	2,500	3,193 b	128 *	80-120	2	24	D2 M1 V3
Vinyl Acetate	2,500	693.9	28 *	63-124	5	24	D2 M2
1,1-Dichloroethane	2,500	3,122	125 *	77-120	3	20	D2 M1
2-Butanone	2,500	2,950	118	57-120	4	32	D2
cis-1,2-Dichloroethene	2,500	3,005	120	75-120	1	20	D2
2,2-Dichloropropane	2,500	2,897	116	72-128	4	24	D2
Chloroform	2,500	2,922	116	78-120	4	20	D2
Bromochloromethane	2,500	3,007	120	78-120	3	20	D2
1,1,1-Trichloroethane	2,500	3,181	127 *	78-120	4	20	D2 M1
1,1-Dichloropropene	2,500	2,754	110	75-120	4	21	D2
Carbon Tetrachloride	2,500	2,766	111	80-120	3	21	D2
1,2-Dichloroethane	2,500	2,586	103	74-120	4	20	D2
Benzene	2,500	2,761	110	77-120	3	20	D2
Trichloroethene	2,500	3,166	127 *	78-122	1	20	D2 M1
1,2-Dichloropropane	2,500	2,693	108	76-120	2	20	D2
Bromodichloromethane	2,500	2,722	109	78-120	3	20	D2
Dibromomethane	2,500	2,595	104	77-120	3	20	D2
4-Methyl-2-Pentanone	2,500	2,230	89	65-120	5	22	D2
cis-1,3-Dichloropropene	2,500	2,856	114	76-120	1	20	D2
Toluene	2,500	2,406	96	73-120	1	20	D2
trans-1,3-Dichloropropene	2,500	2,241	90	72-120	1	20	D2
1,1,2-Trichloroethane	2,500	2,444	98	76-120	1	20	D2
2-Hexanone	2,500	1,924	77	57-121	2	25	D2
1,3-Dichloropropane	2,500	2,493	100	75-120	2	20	D2
Tetrachloroethene	2,500	2,314	93	77-120	0	20	D2
Dibromochloromethane	2,500	2,405	96	76-120	0	20	D2
1,2-Dibromoethane	2,500	2,392	96	77-120	1	20	D2
Chlorobenzene	2,500	2,370	95	78-120	1	20	D2
1,1,1,2-Tetrachloroethane	2,500	2,353	94	77-120	0	20	D2
Ethylbenzene	2,500	2,460	98	78-120	3	26	D2
m,p-Xylenes	5,000	4,447	89	77-120	8	20	D2
o-Xylene	2,500	2,144	86	77-120	7	20	D2
Styrene	2,500	2,134	85	77-120	9	20	D2
Bromoform	2,500	2,129	85	74-121	1	21	D2
Isopropylbenzene	2,500	2,291	92	71-120	0	20	D2
1,1,2,2-Tetrachloroethane	2,500	2,218	89	73-120	8	20	D2

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155376
MSS Lab ID:	215113-006	Sampled:	09/22/09
Matrix:	Water	Received:	09/23/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	100.0		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	2,500	3,195 b	128 *	72-120	10	20	D2 M1 V3
Propylbenzene	2,500	2,304	92	76-120	4	20	D2
Bromobenzene	2,500	2,781	111	75-120	10	20	D2
1,3,5-Trimethylbenzene	2,500	3,106	124 *	77-120	6	20	D2 M1
2-Chlorotoluene	2,500	2,770	111	76-120	2	20	D2
4-Chlorotoluene	2,500	2,488	100	78-120	1	20	D2
tert-Butylbenzene	2,500	2,022	81	76-120	5	21	D2
1,2,4-Trimethylbenzene	2,500	3,242 b	130 *	77-120	5	20	D2 M1 V3
sec-Butylbenzene	2,500	2,205	88	80-120	3	21	D2
para-Isopropyl Toluene	2,500	2,801	112	76-120	5	20	D2
1,3-Dichlorobenzene	2,500	2,387	95	75-120	0	20	D2
1,4-Dichlorobenzene	2,500	2,329	93	77-120	1	23	D2
n-Butylbenzene	2,500	4,406 b	176 *	76-120	6	21	D2 M1 V3
1,2-Dichlorobenzene	2,500	2,468	99	76-120	2	20	D2
1,2-Dibromo-3-Chloropropane	2,500	2,552	102	65-120	6	22	D2
1,2,4-Trichlorobenzene	2,500	2,863	115	73-121	10	20	D2
Hexachlorobutadiene	2,500	2,438	98	73-123	3	25	D2
Naphthalene	2,500	3,204 b	128 *	62-121	10	32	D2 M1 V3
1,2,3-Trichlorobenzene	2,500	3,026	121	66-123	10	29	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	110	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	121 *	78-120	S1

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514128	Batch#:	155421
Matrix:	Water	Analyzed:	09/29/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R7 V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	V1
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	L1 V1
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	L1 V1
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514128	Batch#:	155421
Matrix:	Water	Analyzed:	09/29/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	L1 V1
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	115	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514129

Analyte	Spiked	Result		%REC		Limits	ADEQ Flags
Freon 12	18.75	25.90	b	138		56-140	V3
Chloromethane	18.75	17.08		91		46-142	
Vinyl Chloride	18.75	19.31		103		49-136	
Bromomethane	18.75	11.68	b	62		42-154	V9
Chloroethane	18.75	19.51		104		51-133	
Trichlorofluoromethane	18.75	22.89	b	122		63-135	V3
Iodomethane	18.75	15.40	b	82		70-130	
Acetone	18.75	19.59	b	104		48-130	
1,1-Dichloroethene	18.75	20.99		112		68-133	
Methylene Chloride	18.75	19.65		105		71-120	
Carbon Disulfide	18.75	18.57		99		56-120	
MTBE	18.75	18.92		101		58-120	
trans-1,2-Dichloroethene	18.75	21.40		114		80-120	
Vinyl Acetate	18.75	28.50	b	152	*	63-124	L1 R2 V3
1,1-Dichloroethane	18.75	20.88		111		77-120	
2-Butanone	18.75	19.28		103		57-120	
cis-1,2-Dichloroethene	18.75	20.16		108		75-120	
2,2-Dichloropropane	18.75	29.36	b	157	*	72-128	L1 V3
Chloroform	18.75	20.49		109		78-120	
Bromochloromethane	18.75	21.05		112		78-120	
1,1,1-Trichloroethane	18.75	23.09	b	123	*	78-120	L1 V3
1,1-Dichloropropene	18.75	23.29	b	124	*	75-120	L1 V3
Carbon Tetrachloride	18.75	23.89	b	127	*	80-120	L1 V3
1,2-Dichloroethane	18.75	21.63		115		74-120	
Benzene	18.75	20.98		112		77-120	
Trichloroethene	18.75	20.31		108		78-122	
1,2-Dichloropropane	18.75	20.49		109		76-120	
Bromodichloromethane	18.75	21.17		113		78-120	
Dibromomethane	18.75	20.81		111		77-120	
4-Methyl-2-Pentanone	18.75	20.61		110		65-120	
cis-1,3-Dichloropropene	18.75	22.64	b	121	*	76-120	L1 V3
Toluene	18.75	19.78		105		73-120	
trans-1,3-Dichloropropene	18.75	20.50		109		72-120	
1,1,2-Trichloroethane	18.75	21.44		114		76-120	
2-Hexanone	18.75	20.31		108		57-121	
1,3-Dichloropropane	18.75	21.61		115		75-120	
Tetrachloroethene	18.75	22.40		119		77-120	
Dibromochloromethane	18.75	21.32		114		76-120	
1,2-Dibromoethane	18.75	21.19		113		77-120	
Chlorobenzene	18.75	20.67		110		78-120	
1,1,1,2-Tetrachloroethane	18.75	21.44		114		77-120	
Ethylbenzene	18.75	21.44		114		78-120	
m,p-Xylenes	37.50	42.22		113		77-120	
o-Xylene	18.75	20.52		109		77-120	
Styrene	18.75	20.64		110		77-120	
Bromoform	18.75	20.57		110		74-121	
Isopropylbenzene	18.75	19.16		102		71-120	
1,1,2,2-Tetrachloroethane	18.75	22.66	b	121	*	73-120	L1 V3
1,2,3-Trichloropropane	18.75	21.57		115		72-120	
Propylbenzene	18.75	22.34		119		76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	18.75	20.77	111	75-120	
1,3,5-Trimethylbenzene	18.75	21.90	117	77-120	
2-Chlorotoluene	18.75	21.69	116	76-120	
4-Chlorotoluene	18.75	20.86	111	78-120	
tert-Butylbenzene	18.75	22.15	118	76-120	
1,2,4-Trimethylbenzene	18.75	21.07	112	77-120	
sec-Butylbenzene	18.75	23.06 b	123 *	80-120	L1 V3
para-Isopropyl Toluene	18.75	21.63	115	76-120	
1,3-Dichlorobenzene	18.75	20.56	110	75-120	
1,4-Dichlorobenzene	18.75	20.51	109	77-120	
n-Butylbenzene	18.75	23.74 b	127 *	76-120	L1 V3
1,2-Dichlorobenzene	18.75	20.61	110	76-120	
1,2-Dibromo-3-Chloropropane	18.75	20.73	111	65-120	
1,2,4-Trichlorobenzene	18.75	19.54	104	73-121	
Hexachlorobutadiene	18.75	22.76 b	121	73-123	V3
Naphthalene	18.75	21.57	115	62-121	
1,2,3-Trichlorobenzene	18.75	20.64	110	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514130

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	18.75	25.79 b	138	56-140	0	24	V3
Chloromethane	18.75	17.86	95	46-142	4	24	
Vinyl Chloride	18.75	20.07	107	49-136	4	24	
Bromomethane	18.75	14.99 b	80	42-154	25 *	24	R7 V9
Chloroethane	18.75	19.93	106	51-133	2	25	
Trichlorofluoromethane	18.75	23.62 b	126	63-135	3	20	V3
Iodomethane	18.75	15.96 b	85	70-130	4	20	
Acetone	18.75	18.34 b	98	48-130	7	41	
1,1-Dichloroethene	18.75	19.03	101	68-133	10	20	
Methylene Chloride	18.75	17.87	95	71-120	9	20	
Carbon Disulfide	18.75	17.18	92	56-120	8	20	
MTBE	18.75	18.65	99	58-120	1	21	
trans-1,2-Dichloroethene	18.75	19.43	104	80-120	10	24	
Vinyl Acetate	18.75	24.61 b	131 *	63-124	15	24	L1 R2 V3
1,1-Dichloroethane	18.75	19.48	104	77-120	7	20	
2-Butanone	18.75	17.91	96	57-120	7	32	
cis-1,2-Dichloroethene	18.75	18.53	99	75-120	8	20	
2,2-Dichloropropane	18.75	26.63 b	142 *	72-128	10	24	L1 V3
Chloroform	18.75	19.30	103	78-120	6	20	
Bromochloromethane	18.75	19.10	102	78-120	10	20	
1,1,1-Trichloroethane	18.75	21.39 b	114	78-120	8	20	V3
1,1-Dichloropropene	18.75	21.43 b	114	75-120	8	21	V3
Carbon Tetrachloride	18.75	22.49 b	120	80-120	6	21	V3
1,2-Dichloroethane	18.75	20.05	107	74-120	8	20	
Benzene	18.75	19.27	103	77-120	8	20	
Trichloroethene	18.75	18.67	100	78-122	8	20	
1,2-Dichloropropane	18.75	18.89	101	76-120	8	20	
Bromodichloromethane	18.75	19.70	105	78-120	7	20	
Dibromomethane	18.75	19.40	103	77-120	7	20	
4-Methyl-2-Pentanone	18.75	18.15	97	65-120	13	22	
cis-1,3-Dichloropropene	18.75	20.75 b	111	76-120	9	20	V3
Toluene	18.75	18.46	98	73-120	7	20	
trans-1,3-Dichloropropene	18.75	18.65	99	72-120	9	20	
1,1,2-Trichloroethane	18.75	19.72	105	76-120	8	20	
2-Hexanone	18.75	19.09	102	57-121	6	25	
1,3-Dichloropropane	18.75	19.68	105	75-120	9	20	
Tetrachloroethene	18.75	21.41	114	77-120	5	20	
Dibromochloromethane	18.75	19.72	105	76-120	8	20	
1,2-Dibromoethane	18.75	19.34	103	77-120	9	20	
Chlorobenzene	18.75	19.39	103	78-120	6	20	
1,1,1,2-Tetrachloroethane	18.75	20.10	107	77-120	6	20	
Ethylbenzene	18.75	20.09	107	78-120	7	26	
m,p-Xylenes	37.50	39.43	105	77-120	7	20	
o-Xylene	18.75	19.37	103	77-120	6	20	
Styrene	18.75	19.46	104	77-120	6	20	
Bromoform	18.75	18.95	101	74-121	8	21	
Isopropylbenzene	18.75	18.09	96	71-120	6	20	
1,1,2,2-Tetrachloroethane	18.75	20.26 b	108	73-120	11	20	V3
1,2,3-Trichloropropane	18.75	19.32	103	72-120	11	20	
Propylbenzene	18.75	20.69	110	76-120	8	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155421
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	18.75	19.47	104	75-120	6	20	
1,3,5-Trimethylbenzene	18.75	20.61	110	77-120	6	20	
2-Chlorotoluene	18.75	20.02	107	76-120	8	20	
4-Chlorotoluene	18.75	19.33	103	78-120	8	20	
tert-Butylbenzene	18.75	20.81	111	76-120	6	21	
1,2,4-Trimethylbenzene	18.75	19.75	105	77-120	6	20	
sec-Butylbenzene	18.75	21.60 b	115	80-120	7	21	V3
para-Isopropyl Toluene	18.75	20.22	108	76-120	7	20	
1,3-Dichlorobenzene	18.75	19.45	104	75-120	6	20	
1,4-Dichlorobenzene	18.75	19.22	103	77-120	6	23	
n-Butylbenzene	18.75	22.04 b	118	76-120	7	21	V3
1,2-Dichlorobenzene	18.75	19.10	102	76-120	8	20	
1,2-Dibromo-3-Chloropropane	18.75	18.71	100	65-120	10	22	
1,2,4-Trichlorobenzene	18.75	18.79	100	73-121	4	20	
Hexachlorobutadiene	18.75	22.56 b	120	73-123	1	25	V3
Naphthalene	18.75	20.28	108	62-121	6	32	
1,2,3-Trichlorobenzene	18.75	19.87	106	66-123	4	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514372	Batch#:	155479
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514372	Batch#:	155479
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514373

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	18.75	20.18	108	56-140	
Chloromethane	18.75	16.19	86	46-142	
Vinyl Chloride	18.75	17.71	94	49-136	
Bromomethane	18.75	12.81 b	68	42-154	V9
Chloroethane	18.75	18.40	98	51-133	
Trichlorofluoromethane	18.75	21.14	113	63-135	
Iodomethane	18.75	17.40 b	93	70-130	
Acetone	18.75	15.03 b	80	48-130	
1,1-Dichloroethene	18.75	20.36	109	68-133	
Methylene Chloride	18.75	19.06	102	71-120	
Carbon Disulfide	18.75	17.78	95	56-120	
MTBE	18.75	18.99	101	58-120	
trans-1,2-Dichloroethene	18.75	20.55	110	80-120	
Vinyl Acetate	18.75	27.11 b	145 *	63-124	L1 R2 V3
1,1-Dichloroethane	18.75	20.01	107	77-120	
2-Butanone	18.75	17.18	92	57-120	
cis-1,2-Dichloroethene	18.75	19.22	103	75-120	
2,2-Dichloropropane	18.75	27.54 b	147 *	72-128	L1 V3
Chloroform	18.75	19.86	106	78-120	
Bromochloromethane	18.75	20.03	107	78-120	
1,1,1-Trichloroethane	18.75	22.15	118	78-120	
1,1-Dichloropropene	18.75	22.00	117	75-120	
Carbon Tetrachloride	18.75	22.55	120	80-120	
1,2-Dichloroethane	18.75	20.48	109	74-120	
Benzene	18.75	19.91	106	77-120	
Trichloroethene	18.75	19.51	104	78-122	
1,2-Dichloropropane	18.75	19.97	106	76-120	
Bromodichloromethane	18.75	20.55	110	78-120	
Dibromomethane	18.75	20.75	111	77-120	
4-Methyl-2-Pentanone	18.75	19.71	105	65-120	
cis-1,3-Dichloropropene	18.75	21.68	116	76-120	
Toluene	18.75	19.46	104	73-120	
trans-1,3-Dichloropropene	18.75	19.82	106	72-120	
1,1,2-Trichloroethane	18.75	20.45	109	76-120	
2-Hexanone	18.75	19.09	102	57-121	
1,3-Dichloropropane	18.75	20.62	110	75-120	
Tetrachloroethene	18.75	21.91	117	77-120	
Dibromochloromethane	18.75	20.62	110	76-120	
1,2-Dibromoethane	18.75	20.85	111	77-120	
Chlorobenzene	18.75	20.28	108	78-120	
1,1,1,2-Tetrachloroethane	18.75	20.86	111	77-120	
Ethylbenzene	18.75	21.01	112	78-120	
m,p-Xylenes	37.50	41.47	111	77-120	
o-Xylene	18.75	20.46	109	77-120	
Styrene	18.75	20.21	108	77-120	
Bromoform	18.75	19.85	106	74-121	
Isopropylbenzene	18.75	18.78	100	71-120	
1,1,2,2-Tetrachloroethane	18.75	21.92	117	73-120	
1,2,3-Trichloropropane	18.75	20.89	111	72-120	
Propylbenzene	18.75	21.76	116	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	18.75	20.04	107	75-120	
1,3,5-Trimethylbenzene	18.75	21.22	113	77-120	
2-Chlorotoluene	18.75	20.90	111	76-120	
4-Chlorotoluene	18.75	20.28	108	78-120	
tert-Butylbenzene	18.75	21.79	116	76-120	
1,2,4-Trimethylbenzene	18.75	20.62	110	77-120	
sec-Butylbenzene	18.75	22.69 b	121 *	80-120	L1 V3
para-Isopropyl Toluene	18.75	21.00	112	76-120	
1,3-Dichlorobenzene	18.75	20.13	107	75-120	
1,4-Dichlorobenzene	18.75	19.99	107	77-120	
n-Butylbenzene	18.75	23.01 b	123 *	76-120	L1 V3
1,2-Dichlorobenzene	18.75	20.13	107	76-120	
1,2-Dibromo-3-Chloropropane	18.75	20.41	109	65-120	
1,2,4-Trichlorobenzene	18.75	19.50	104	73-121	
Hexachlorobutadiene	18.75	22.20 b	118	73-123	
Naphthalene	18.75	21.38	114	62-121	
1,2,3-Trichlorobenzene	18.75	20.26	108	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514374

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	18.75	19.89	106	56-140	1	24	
Chloromethane	18.75	16.50	88	46-142	2	24	
Vinyl Chloride	18.75	18.30	98	49-136	3	24	
Bromomethane	18.75	14.72 b	79	42-154	14	24	V9
Chloroethane	18.75	18.52	99	51-133	1	25	
Trichlorofluoromethane	18.75	21.30	114	63-135	1	20	
Iodomethane	18.75	17.29 b	92	70-130	1	20	
Acetone	18.75	14.84 b	79	48-130	1	41	
1,1-Dichloroethene	18.75	19.93	106	68-133	2	20	
Methylene Chloride	18.75	18.51	99	71-120	3	20	
Carbon Disulfide	18.75	17.26	92	56-120	3	20	
MTBE	18.75	18.70	100	58-120	2	21	
trans-1,2-Dichloroethene	18.75	20.29	108	80-120	1	24	
Vinyl Acetate	18.75	26.41 b	141 *	63-124	3	24	L1 R2 V3
1,1-Dichloroethane	18.75	19.84	106	77-120	1	20	
2-Butanone	18.75	17.26	92	57-120	0	32	
cis-1,2-Dichloroethene	18.75	19.20	102	75-120	0	20	
2,2-Dichloropropane	18.75	26.80 b	143 *	72-128	3	24	L1 V3
Chloroform	18.75	19.63	105	78-120	1	20	
Bromochloromethane	18.75	19.93	106	78-120	0	20	
1,1,1-Trichloroethane	18.75	21.31	114	78-120	4	20	
1,1-Dichloropropene	18.75	22.01	117	75-120	0	21	
Carbon Tetrachloride	18.75	22.99	123 *	80-120	2	21	L1
1,2-Dichloroethane	18.75	20.66	110	74-120	1	20	
Benzene	18.75	19.61	105	77-120	2	20	
Trichloroethene	18.75	19.04	102	78-122	2	20	
1,2-Dichloropropane	18.75	19.29	103	76-120	3	20	
Bromodichloromethane	18.75	20.07	107	78-120	2	20	
Dibromomethane	18.75	19.99	107	77-120	4	20	
4-Methyl-2-Pentanone	18.75	19.67	105	65-120	0	22	
cis-1,3-Dichloropropene	18.75	21.00	112	76-120	3	20	
Toluene	18.75	19.44	104	73-120	0	20	
trans-1,3-Dichloropropene	18.75	19.51	104	72-120	2	20	
1,1,2-Trichloroethane	18.75	20.58	110	76-120	1	20	
2-Hexanone	18.75	18.99	101	57-121	1	25	
1,3-Dichloropropane	18.75	20.75	111	75-120	1	20	
Tetrachloroethene	18.75	22.19	118	77-120	1	20	
Dibromochloromethane	18.75	20.81	111	76-120	1	20	
1,2-Dibromoethane	18.75	20.50	109	77-120	2	20	
Chlorobenzene	18.75	20.16	108	78-120	1	20	
1,1,1,2-Tetrachloroethane	18.75	20.86	111	77-120	0	20	
Ethylbenzene	18.75	20.81	111	78-120	1	26	
m,p-Xylenes	37.50	40.95	109	77-120	1	20	
o-Xylene	18.75	20.14	107	77-120	2	20	
Styrene	18.75	20.08	107	77-120	1	20	
Bromoform	18.75	19.96	106	74-121	1	21	
Isopropylbenzene	18.75	18.28	98	71-120	3	20	
1,1,2,2-Tetrachloroethane	18.75	21.38	114	73-120	3	20	
1,2,3-Trichloropropane	18.75	20.10	107	72-120	4	20	
Propylbenzene	18.75	20.91	111	76-120	4	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	18.75	19.89	106	75-120	1	20	
1,3,5-Trimethylbenzene	18.75	20.85	111	77-120	2	20	
2-Chlorotoluene	18.75	20.66	110	76-120	1	20	
4-Chlorotoluene	18.75	19.68	105	78-120	3	20	
tert-Butylbenzene	18.75	21.30	114	76-120	2	21	
1,2,4-Trimethylbenzene	18.75	20.50	109	77-120	1	20	
sec-Butylbenzene	18.75	21.87 b	117	80-120	4	21	V3
para-Isopropyl Toluene	18.75	20.44	109	76-120	3	20	
1,3-Dichlorobenzene	18.75	19.64	105	75-120	2	20	
1,4-Dichlorobenzene	18.75	19.71	105	77-120	1	23	
n-Butylbenzene	18.75	22.45 b	120	76-120	2	21	V3
1,2-Dichlorobenzene	18.75	19.73	105	76-120	2	20	
1,2-Dibromo-3-Chloropropane	18.75	20.46	109	65-120	0	22	
1,2,4-Trichlorobenzene	18.75	19.25	103	73-121	1	20	
Hexachlorobutadiene	18.75	22.96 b	122	73-123	3	25	
Naphthalene	18.75	21.17	113	62-121	1	32	
1,2,3-Trichlorobenzene	18.75	20.23	108	66-123	0	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514447

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	32.14	129	56-140	
Chloromethane	<0.2000	25.00	23.82	95	46-142	
Vinyl Chloride	0.2459	25.00	25.56	101	49-136	
Bromomethane	<0.2354	25.00	18.98 b	76	42-154	V9
Chloroethane	<0.2000	25.00	24.86	99	51-133	
Trichlorofluoromethane	<0.2000	25.00	29.44	118	63-135	
Iodomethane	ND	25.00	23.09 b	92	60-140	
Acetone	<1.000	25.00	18.53 b	74	48-130	
1,1-Dichloroethene	20.10	25.00	47.91	111	68-133	
Methylene Chloride	0.3501	25.00	26.57	105	71-120	
Carbon Disulfide	<0.1000	25.00	25.92	104	56-120	
MTBE	0.2050	25.00	25.18	100	58-120	
trans-1,2-Dichloroethene	0.2732	25.00	29.34	116	80-120	
Vinyl Acetate	<2.000	25.00	32.45 b	130 *	63-124	M1 R2 V3
1,1-Dichloroethane	14.18	25.00	42.12	112	77-120	
2-Butanone	<2.000	25.00	21.43	86	57-120	
cis-1,2-Dichloroethene	21.91	25.00	49.57	111	75-120	
2,2-Dichloropropane	<0.1000	25.00	37.84 b	151 *	72-128	M1 V3
Chloroform	0.4415	25.00	28.55	112	78-120	
Bromochloromethane	<0.1000	25.00	27.96	112	78-120	
1,1,1-Trichloroethane	<0.1000	25.00	32.02	128 *	78-120	M1
1,1-Dichloropropene	<0.1348	25.00	31.70	127 *	75-120	M1
Carbon Tetrachloride	<0.1000	25.00	32.29	129 *	80-120	M1
1,2-Dichloroethane	0.2166	25.00	28.03	111	74-120	
Benzene	<0.1000	25.00	27.63	111	77-120	
Trichloroethene	83.86	25.00	103.7 >LR b	79	78-122	
1,2-Dichloropropane	<0.1181	25.00	26.98	108	76-120	
Bromodichloromethane	<0.1000	25.00	28.07	112	78-120	
Dibromomethane	<0.1043	25.00	26.64	107	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	23.11	92	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	28.00	112	76-120	
Toluene	<0.1000	25.00	26.35	105	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	24.30	97	72-120	
1,1,2-Trichloroethane	<0.1321	25.00	26.79	107	76-120	
2-Hexanone	<2.000	25.00	22.16	89	57-121	
1,3-Dichloropropane	<0.1000	25.00	27.13	109	75-120	
Tetrachloroethene	1.309	25.00	31.49	121 *	77-120	M1
Dibromochloromethane	<0.1000	25.00	26.25	105	76-120	
1,2-Dibromoethane	<0.1010	25.00	26.33	105	77-120	
Chlorobenzene	<0.1000	25.00	27.17	109	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	27.78	111	77-120	
Ethylbenzene	<0.1000	25.00	28.59	114	78-120	
m,p-Xylenes	<0.1595	50.00	56.24	112	77-120	
o-Xylene	<0.1000	25.00	27.38	110	77-120	
Styrene	<0.1000	25.00	27.02	108	77-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Bromoform	<0.2000	25.00	22.84	91	74-121	
Isopropylbenzene	<0.1003	25.00	25.79	103	71-120	
1,1,2,2-Tetrachloroethane	<0.1203	25.00	28.29	113	73-120	
1,2,3-Trichloropropane	<0.1044	25.00	26.39	106	72-120	
Propylbenzene	<0.1085	25.00	29.83	119	76-120	
Bromobenzene	<0.1000	25.00	27.49	110	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	28.89	116	77-120	
2-Chlorotoluene	<0.1000	25.00	28.63	115	76-120	
4-Chlorotoluene	<0.1000	25.00	27.74	111	78-120	
tert-Butylbenzene	<0.1000	25.00	29.42	118	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	28.03	112	77-120	
sec-Butylbenzene	<0.1048	25.00	30.41 b	122 *	80-120	M1 V3
para-Isopropyl Toluene	<0.1170	25.00	28.60	114	76-120	
1,3-Dichlorobenzene	<0.1161	25.00	27.01	108	75-120	
1,4-Dichlorobenzene	<0.1148	25.00	26.32	105	77-120	
n-Butylbenzene	<0.1076	25.00	30.52 b	122 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	26.84	107	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.25	97	65-120	
1,2,4-Trichlorobenzene	<0.1359	25.00	24.58	98	73-121	
Hexachlorobutadiene	<0.4000	25.00	29.41 b	118	73-123	
Naphthalene	<0.4000	25.00	25.88	104	62-121	
1,2,3-Trichlorobenzene	<0.1460	25.00	25.23	101	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC514448

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	30.05	120	56-140	7	24	
Chloromethane	25.00	22.07	88	46-142	8	24	
Vinyl Chloride	25.00	24.67	98	49-136	4	24	
Bromomethane	25.00	21.48 b	86	42-154	12	24	V9
Chloroethane	25.00	23.78	95	51-133	4	25	
Trichlorofluoromethane	25.00	27.99	112	63-135	5	20	
Iodomethane	25.00	20.86 b	83	60-140	10	30	
Acetone	25.00	17.07 b	68	48-130	8	41	
1,1-Dichloroethene	25.00	44.99	100	68-133	6	20	
Methylene Chloride	25.00	25.22	99	71-120	5	20	
Carbon Disulfide	25.00	23.87	95	56-120	8	20	
MTBE	25.00	23.73	94	58-120	6	21	
trans-1,2-Dichloroethene	25.00	27.27	108	80-120	7	24	
Vinyl Acetate	25.00	28.90 b	116	63-124	12	24	R2 V3
1,1-Dichloroethane	25.00	38.90	99	77-120	8	20	
2-Butanone	25.00	20.03	80	57-120	7	32	
cis-1,2-Dichloroethene	25.00	45.17	93	75-120	9	20	
2,2-Dichloropropane	25.00	33.77 b	135 *	72-128	11	24	M1 V3
Chloroform	25.00	25.92	102	78-120	10	20	
Bromochloromethane	25.00	25.54	102	78-120	9	20	
1,1,1-Trichloroethane	25.00	29.66	119	78-120	8	20	
1,1-Dichloropropene	25.00	30.45	122 *	75-120	4	21	M1
Carbon Tetrachloride	25.00	31.95	128 *	80-120	1	21	M1
1,2-Dichloroethane	25.00	27.23	108	74-120	3	20	
Benzene	25.00	26.71	107	77-120	3	20	
Trichloroethene	25.00	100.8 >LR b	68 *	78-122	NC	20	M2
1,2-Dichloropropane	25.00	26.28	105	76-120	3	20	
Bromodichloromethane	25.00	26.78	107	78-120	5	20	
Dibromomethane	25.00	26.62	106	77-120	0	20	
4-Methyl-2-Pentanone	25.00	23.57	94	65-120	2	22	
cis-1,3-Dichloropropene	25.00	26.78	107	76-120	4	20	
Toluene	25.00	26.12	104	73-120	1	20	
trans-1,3-Dichloropropene	25.00	23.64	95	72-120	3	20	
1,1,2-Trichloroethane	25.00	26.47	106	76-120	1	20	
2-Hexanone	25.00	22.06	88	57-121	0	25	
1,3-Dichloropropane	25.00	26.43	106	75-120	3	20	
Tetrachloroethene	25.00	31.20	120	77-120	1	20	
Dibromochloromethane	25.00	25.62	102	76-120	2	20	
1,2-Dibromoethane	25.00	25.90	104	77-120	2	20	
Chlorobenzene	25.00	26.57	106	78-120	2	20	
1,1,1,2-Tetrachloroethane	25.00	27.32	109	77-120	2	20	
Ethylbenzene	25.00	27.93	112	78-120	2	26	
m,p-Xylenes	50.00	54.53	109	77-120	3	20	
o-Xylene	25.00	26.79	107	77-120	2	20	
Styrene	25.00	26.70	107	77-120	1	20	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215065	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromoform	25.00	22.34	89	74-121	2	21	
Isopropylbenzene	25.00	25.01	100	71-120	3	20	
1,1,2,2-Tetrachloroethane	25.00	26.87	107	73-120	5	20	
1,2,3-Trichloropropane	25.00	25.40	102	72-120	4	20	
Propylbenzene	25.00	28.45	114	76-120	5	20	
Bromobenzene	25.00	26.42	106	75-120	4	20	
1,3,5-Trimethylbenzene	25.00	27.66	111	77-120	4	20	
2-Chlorotoluene	25.00	27.48	110	76-120	4	20	
4-Chlorotoluene	25.00	26.38	106	78-120	5	20	
tert-Butylbenzene	25.00	28.39	114	76-120	4	21	
1,2,4-Trimethylbenzene	25.00	26.62	106	77-120	5	20	
sec-Butylbenzene	25.00	29.33 b	117	80-120	4	21	V3
para-Isopropyl Toluene	25.00	27.39	110	76-120	4	20	
1,3-Dichlorobenzene	25.00	25.84	103	75-120	4	20	
1,4-Dichlorobenzene	25.00	25.39	102	77-120	4	23	
n-Butylbenzene	25.00	29.35 b	117	76-120	4	21	V3
1,2-Dichlorobenzene	25.00	25.53	102	76-120	5	20	
1,2-Dibromo-3-Chloropropane	25.00	24.04	96	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	24.04	96	73-121	2	20	
Hexachlorobutadiene	25.00	29.48 b	118	73-123	0	25	
Naphthalene	25.00	25.91	104	62-121	0	32	
1,2,3-Trichlorobenzene	25.00	25.11	100	66-123	0	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499361940008 File : ji808 Time : 09-SEP-2009 00:19

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	42221	27.77	
75	30% - 60% of mass 95	74037	48.70	
95		152042	100.00	
96	5% - 9% of mass 95	10062	6.62	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	113397	74.58	
175	5% - 9% of mass 174	8359	7.37	
176	> 95% and < 101% of mass 174	108642	95.81	
177	5% - 9% of mass 176	7287	6.71	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499363592006 File : ji906 Time : 09-SEP-2009 14:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37064	27.53	
75	30% - 60% of mass 95	66016	49.03	
95		134640	100.00	
96	5% - 9% of mass 95	8828	6.56	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	99874	74.18	
175	5% - 9% of mass 174	7262	7.27	
176	> 95% and < 101% of mass 174	94946	95.07	
177	5% - 9% of mass 176	6387	6.73	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499392292002 File : jit02 Time : 29-SEP-2009 11:11

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	84730	29.38	
75	30% - 60% of mass 95	148800	51.59	
95		288426	100.00	
96	5% - 9% of mass 95	19269	6.68	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	214912	74.51	
175	5% - 9% of mass 174	16023	7.46	
176	> 95% and < 101% of mass 174	208341	96.94	
177	5% - 9% of mass 176	14218	6.82	

Analyst: DNT Date: 09/29/09 Reviewer: LW Date: 09/29/09

CURTIS & TOMPKINS BFB TUNE FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499393725003 File : jiu03 Time : 30-SEP-2009 11:08

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	88029	28.78	
75	30% - 60% of mass 95	154965	50.66	
95		305898	100.00	
96	5% - 9% of mass 95	19816	6.48	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	230698	75.42	
175	5% - 9% of mass 174	17044	7.39	
176	> 95% and < 101% of mass 174	220181	95.44	
177	5% - 9% of mass 176	14632	6.65	

Analyst: MJD Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839390808002 File : kis02 Time : 28-SEP-2009 10:00

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	20688	16.74	
75	30% - 60% of mass 95	59855	48.45	
95		123549	100.00	
96	5% - 9% of mass 95	8677	7.02	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	95029	76.92	
175	5% - 9% of mass 174	7385	7.77	
176	> 95% and < 101% of mass 174	90992	95.75	
177	5% - 9% of mass 176	6062	6.66	

Analyst: BO Date: 09/28/09 Reviewer: LW Date: 09/28/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215065 MSVOA Water: EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Date : 09-SEP-2009 02:42 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ji812	499361940012	.25/0.5PPB	09-SEP-2009 02:42	S12733 (2000000X), S12773 (2000000X), S12217 (2000000X), S12685 (1000000X), S12692 (2500X)
L2	ji813	499361940013	0.5/1PPB	09-SEP-2009 03:16	S12733 (1000000X), S12773 (1000000X), S12217 (1000000X), S12685 (500000X), S12692 (2500X)
L3	ji814	499361940014	2PPB	09-SEP-2009 03:51	S12733 (250000X), S12773 (250000X), S12217 (500000X), S12685 (250000X), S12692 (2500X)
L4	ji815	499361940015	5PPB	09-SEP-2009 04:25	S12733 (100000X), S12773 (100000X), S12217 (200000X), S12685 (100000X), S12692 (2500X)
L5	ji816	499361940016	10PPB	09-SEP-2009 04:59	S12733 (50000X), S12773 (50000X), S12217 (100000X), S12685 (50000X), S12692 (2500X)
L6	ji817	499361940017	20PPB	09-SEP-2009 05:34	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12685 (25000X), S12692 (2500X)
L7	ji818	499361940018	50PPB	09-SEP-2009 06:08	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12685 (10000X), S12692 (2500X)
L8	ji819	499361940019	75PPB	09-SEP-2009 06:42	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12685 (6667X), S12692 (2500X)
L9	ji820	499361940020	100PPB	09-SEP-2009 07:17	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12685 (5000X), S12692 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.6454	0.6785	0.6243	0.6055	0.7615	0.7349	0.6564	0.6711	AVRG		1.48764		0.6722	8	15	0.05	0.99	
Chloromethane		1.5093	1.4219	1.2231	1.2011	1.4382	1.3492	1.2959	1.3263	AVRG		0.74314		1.3456	8	15	0.10	0.99	
Vinyl Chloride	0.8871	0.9513	1.0019	0.9129	0.8872	1.1307	1.0595	0.9789	0.9942	AVRG		1.02231		0.9782	8	15	0.05	0.99	
Bromomethane		0.4981m	0.5747	0.4665	0.4524	0.5383	0.5160	0.4937	0.5160	AVRG		1.97254		0.5070	8	15	0.05	0.99	
Chloroethane		0.7052	0.6161	0.5678	0.4631	0.5966	0.5465	0.5283	0.5237	AVRG		1.75927		0.5684	13	15	0.05	0.99	
Trichlorofluoromethane		0.6799	0.7087	0.6587	0.6243	0.8054	0.7530	0.6843	0.6989	AVRG		1.42521		0.7017	8	15	0.05	0.99	
Acetone				0.3953	0.3583	0.2918	0.2818	0.2980	0.3206	AVRG		3.08358		0.3243	14	15	0.05	0.99	
1,1-Dichloroethene		0.3480	0.5008	0.4908	0.4341	0.5199	0.5101	0.4913	0.5048	AVRG		2.10536		0.4750	12	15	0.05	0.99	
Iodomethane			0.2633	0.3064	0.3898	0.5675	0.6161	0.6070	0.6432	QUAD	2.11604	1.65576	-0.00197	0.4848	0.999	15	0.05	0.99	
Methylene Chloride		0.7746	0.7235	0.7242	0.7005	0.7386	0.7000	0.6875	0.7221	AVRG		1.38623		0.7214	4	15	0.05	0.99	
Carbon Disulfide		1.8372	2.2159	2.1329	1.9816	2.3654	2.2686	2.1810	2.2537	AVRG		0.46414		2.1545	8	15	0.05	0.99	
MTBE		1.8427	1.7628	1.6487	1.6803	1.9370	1.8518	1.8190	1.8911	AVRG		0.55427		1.8042	6	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5034	0.6153	0.5270	0.5171	0.5979	0.5853	0.5588	0.5809	AVRG		1.78346		0.5607	7	15	0.05	0.99	
Vinyl Acetate					1.2081	2.0056	2.0275	1.0372	1.1031	AVRG		0.67737		1.4763	**34**	15	0.05	0.99	rsd
1,1-Dichloroethane		1.2585	1.3704	1.2751	1.2341	1.4267	1.3592	1.3247	1.3931	AVRG		0.75174		1.3302	5	15	0.10	0.99	
2-Butanone			0.5118	0.4767	0.4601	0.4448	0.4177	0.4074	0.4395	AVRG		2.21653		0.4512	8	15	0.05	0.99	
2,2-Dichloropropane		0.5896	0.6552	0.6206	0.5776	0.6710	0.6525	0.6117	0.6179	AVRG		1.60125		0.6245	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6149	0.6824	0.6297	0.6000	0.6898	0.6643	0.6468	0.6782	AVRG		1.53665		0.6508	5	15	0.05	0.99	
Chloroform		1.3337	1.1517	1.0418	0.9891	1.1244	1.0792	1.0424	1.0773	AVRG		0.90501		1.1050	10	15	0.05	0.99	
Bromochloromethane		0.2603	0.2901	0.2729	0.2739	0.3214	0.3138	0.3131	0.3272	AVRG		3.37184		0.2966	9	15	0.05	0.99	
1,1,1-Trichloroethane		0.5468	0.6897	0.6722	0.6381	0.7167	0.7218	0.6866	0.6753	AVRG		1.49613		0.6684	8	15	0.05	0.99	
1,1-Dichloropropene		0.4024	0.5019	0.4981	0.4596	0.5005	0.5064	0.4859	0.4620	AVRG		2.09601		0.4771	7	15	0.05	0.99	
Carbon Tetrachloride		0.2220	0.3158	0.3361	0.3060	0.3254	0.3423	0.3289	0.2976	AVRG		3.23351		0.3093	12	15	0.05	0.99	
1,2-Dichloroethane		0.5312	0.5433	0.5139	0.5129	0.5686	0.5494	0.5388	0.5407	AVRG		1.86102		0.5373	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.4940	1.5343	1.4619	1.3935	1.5659	1.4939	1.4331	1.4346	AVRG		0.67733		1.4764	4	15	0.05	0.99	
Trichloroethene		0.3135	0.3737	0.3691	0.3398	0.3618	0.3472	0.3736	0.3715	AVRG		2.80687		0.3563	6	15	0.05	0.99	
1,2-Dichloropropane		0.4959	0.5074	0.4688	0.4571	0.5081	0.4901	0.4861	0.4900	AVRG		2.04943		0.4879	4	15	0.05	0.99	
Bromodichloromethane		0.4761	0.5057	0.4681	0.4607	0.5259	0.5008	0.4944	0.5056	AVRG		2.03182		0.4922	4	15	0.05	0.99	
Dibromomethane		0.2213	0.2515	0.2235	0.2288	0.2652	0.2537	0.2501	0.2558	AVRG		4.10292		0.2437	7	15	0.05	0.99	
4-Methyl-2-Pentanone			0.5531	0.4822	0.4919	0.5910	0.5673	0.5606	0.5788	AVRG		1.83014		0.5464	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.6024	0.6368	0.5960	0.5872	0.6698	0.6323	0.6265	0.6374	AVRG		1.60370		0.6236	4	15	0.05	0.99	
Toluene		0.9856	1.0398	1.1786	1.1103	1.0205	1.0238	0.9738	0.9466	AVRG		0.96630		1.0349	7	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6631	0.6595	0.6418	0.6652	0.7426	0.7315	0.6991	0.7252	AVRG		1.44717		0.6910	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.2148	0.2207	0.2072	0.2073	0.2378	0.2333	0.2264	0.2322	AVRG		4.49555		0.2224	5	15	0.05	0.99	
2-Hexanone			0.5124	0.4799	0.4626	0.4969	0.4837	0.4727	0.4923	AVRG		2.05860		0.4858	3	15	0.05	0.99	
1,3-Dichloropropane		0.6815	0.7001	0.6488	0.6654	0.7489	0.7366	0.7191	0.7403	AVRG		1.41827		0.7051	5	15	0.05	0.99	
Tetrachloroethene		0.2828	0.3738	0.3636	0.3348	0.3459	0.3747	0.3611	0.3305	AVRG		2.89101		0.3459	9	15	0.05	0.99	
Dibromochloromethane		0.3539	0.3932	0.3659	0.3657	0.4283	0.4223	0.4121	0.4221	AVRG		2.52887		0.3954	8	15	0.05	0.99	
1,2-Dibromoethane		0.3220	0.3808	0.3609	0.3683	0.4241	0.4197	0.4033	0.4164	AVRG		2.58446		0.3869	9	15	0.05	0.99	
Chlorobenzene		1.0262	1.0857	0.9794	0.9673	1.0854	1.0727	1.0391	1.0212	AVRG		0.96653		1.0346	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3105	0.3559	0.3269	0.3232	0.3626	0.3676	0.3618	0.3585	AVRG		2.89133		0.3459	6	15	0.05	0.99	
Ethylbenzene		1.8521	2.0005	1.9213	1.8343	1.8776	1.9187	1.8107	1.6925	AVRG		0.53663		1.8635	5	15	0.05	0.99	
m,p-Xylenes	0.6689	0.6306	0.6920	0.6939	0.6668	0.6568	0.6752	0.6381	0.5904	AVRG		1.52215		0.6570	5	15	0.05	0.99	
o-Xylene		0.6433	0.6674	0.6713	0.6431	0.6613	0.6763	0.6410	0.6061	AVRG		1.53558		0.6512	4	15	0.05	0.99	
Styrene		1.1338	1.2490	1.1403	1.1414	1.2543	1.2449	1.1801	1.1663	AVRG		0.84121		1.1888	4	15	0.05	0.99	
Bromoform		0.2349	0.2643	0.2432	0.2578	0.2956	0.2949	0.2876	0.2929	AVRG		3.68474		0.2714	9	15	0.10	0.99	
Isopropylbenzene		3.1907	3.5284	3.3646	3.1636	3.2479	3.4516	3.2783	2.9069	AVRG		0.30614		3.2665	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.9599	0.9087	0.8036	0.8776	1.0791	1.0511	0.9155	0.9342	AVRG		1.06246		0.9412	10	15	0.30	0.99	
1,2,3-Trichloropropane		0.9685	0.9189	0.8487	0.8603	0.9818	0.9356	0.8992	0.8954	AVRG		1.09462		0.9136	5	15	0.05	0.99	
Propylbenzene		4.3101	4.6513	4.4056	4.1873	4.2283	4.4594	4.1717	3.7040	AVRG		0.23448		4.2647	7	15	0.05	0.99	
Bromobenzene		0.8081	0.8911	0.8564	0.8262	0.9559	0.9472	0.9017	0.8894	AVRG		1.13059		0.8845	6	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.7587	2.8838	2.7952	2.6280	2.7326	2.7825	2.6606	2.3692	AVRG		0.37019		2.7013	6	15	0.05	0.99	
2-Chlorotoluene		3.0925	3.1957	2.8991	2.7035	2.9645	2.9342	2.7835	2.5525	AVRG		0.34594		2.8907	7	15	0.05	0.99	
4-Chlorotoluene		2.9945	3.0070	2.6480	2.5894	2.7740	2.7643	2.6642	2.5013	AVRG		0.36459		2.7428	7	15	0.05	0.99	
tert-Butylbenzene		2.0959	2.2586	2.1555	2.0563	2.1153	2.2614	2.1637	1.8725	AVRG		0.47116		2.1224	6	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.8859	2.9236	2.9257	2.7624	2.8005	2.8327	2.6903	2.5030	AVRG		0.35836		2.7905	5	15	0.05	0.99	
sec-Butylbenzene		3.0771	3.5544	3.5133	3.2045	3.2342	3.5171	3.3395	2.9237	AVRG		0.30345		3.2955	7	15	0.05	0.99	
para-Isopropyl Toluene		2.5921	2.7653	2.6481	2.4663	2.5556	2.6975	2.5998	2.3142	AVRG		0.38762		2.5799	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.5381	1.6866	1.5352	1.4636	1.6278	1.6055	1.5759	1.5079	AVRG		0.63792		1.5676	5	15	0.05	0.99	
1,4-Dichlorobenzene		1.6780	1.7525	1.5542	1.5378	1.7267	1.6936	1.6183	1.5769	AVRG		0.60892		1.6423	5	15	0.05	0.99	
n-Butylbenzene		2.6320	2.7602	2.6553	2.4553	2.5151	2.6873	2.5971	2.2981	AVRG		0.38834		2.5751	6	15	0.05	0.99	
1,2-Dichlorobenzene		1.5331	1.5187	1.4267	1.4008	1.5876	1.5551	1.5086	1.4678	AVRG		0.66676		1.4998	4	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1652	0.1336	0.1517	0.1713	0.1697	0.1623	0.1661	AVRG		6.25058		0.1600	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.0034	0.8829	0.8119	0.8084	0.9164	0.9035	0.8982	0.8686	AVRG		1.12783		0.8867	7	15	0.05	0.99	
Hexachlorobutadiene			0.2878	0.2905	0.2638	0.2719	0.3130	0.3101	0.2634	AVRG		3.49917		0.2858	7	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.8799	1.8182	1.7200	1.7448	2.0430	2.0081	1.9450	1.9629	AVRG		0.52904		1.8902	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7229	0.7418	0.6910	0.6958	0.8029	0.7992	0.7930	0.7811	AVRG		1.32723		0.7534	6	15	0.05	0.99	
Dibromofluoromethane	0.5749	0.5652	0.5619	0.5609	0.5627	0.5613	0.5695	0.5654	0.5860	AVRG		1.76204		0.5675	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.4074	0.4080	0.4067	0.3908	0.4007	0.3964	0.3859	0.3847	0.3725	AVRG		2.53295		0.3948	3	15	0.05	0.99	
Toluene-d8	1.4162	1.4046	1.4140	1.4055	1.4132	1.4016	1.4212	1.4115	1.4191	AVRG		0.70827		1.4119	0	15	0.05	0.99	
Bromofluorobenzene	1.0908	1.1017	1.0830	1.0935	1.0812	1.0846	1.0831	1.0776	1.0653	AVRG		0.92205		1.0845	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-4	2.000	1	5.000	-7	10.00	-10	20.00	13	50.00	9	75.00	-2	100.0	0
Chloromethane			1.000	12	2.000	6	5.000	-9	10.00	-11	20.00	7	50.00	0	75.00	-4	100.0	-1
Vinyl Chloride	0.500	-9	1.000	-3	2.000	2	5.000	-7	10.00	-9	20.00	16	50.00	8	75.00	0	100.0	2
Bromomethane			1.000	-2	2.000	13	5.000	-8	10.00	-11	20.00	6	50.00	2	75.00	-3	100.0	2
Chloroethane			1.000	24	2.000	8	5.000	0	10.00	-19	20.00	5	50.00	-4	75.00	-7	100.0	-8
Trichlorofluoromethane			1.000	-3	2.000	1	5.000	-6	10.00	-11	20.00	15	50.00	7	75.00	-2	100.0	0
Acetone							5.000	22	10.00	10	20.00	-10	50.00	-13	75.00	-8	100.0	-1
1,1-Dichloroethene			0.500	-27	2.000	5	5.000	3	10.00	-9	20.00	9	50.00	7	75.00	3	100.0	6
Iodomethane					2.000	49	5.000	-7	10.00	-15	20.00	3	50.00	3	75.00	-2	100.0	0
Methylene Chloride			0.500	7	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	-3	75.00	-5	100.0	0
Carbon Disulfide			0.500	-15	2.000	3	5.000	-1	10.00	-8	20.00	10	50.00	5	75.00	1	100.0	5
MTBE			0.500	2	2.000	-2	5.000	-9	10.00	-7	20.00	7	50.00	3	75.00	1	100.0	5
trans-1,2-Dichloroethene			0.500	-10	2.000	10	5.000	-6	10.00	-8	20.00	7	50.00	4	75.00	0	100.0	4
Vinyl Acetate									10.00	-18	20.00	36	50.00	37	75.00	-30	100.0	-25
1,1-Dichloroethane			0.500	-5	2.000	3	5.000	-4	10.00	-7	20.00	7	50.00	2	75.00	0	100.0	5
2-Butanone					2.000	13	5.000	6	10.00	2	20.00	-1	50.00	-7	75.00	-10	100.0	-3
2,2-Dichloropropane			0.500	-6	2.000	5	5.000	-1	10.00	-8	20.00	7	50.00	4	75.00	-2	100.0	-1
cis-1,2-Dichloroethene			0.500	-6	2.000	5	5.000	-3	10.00	-8	20.00	6	50.00	2	75.00	-1	100.0	4
Chloroform			0.500	21	2.000	4	5.000	-6	10.00	-10	20.00	2	50.00	-2	75.00	-6	100.0	-3
Bromochloromethane			0.500	-12	2.000	-2	5.000	-8	10.00	-8	20.00	8	50.00	6	75.00	6	100.0	10
1,1,1-Trichloroethane			0.500	-18	2.000	3	5.000	1	10.00	-5	20.00	7	50.00	8	75.00	3	100.0	1
1,1-Dichloropropene			0.500	-16	2.000	5	5.000	4	10.00	-4	20.00	5	50.00	6	75.00	2	100.0	-3
Carbon Tetrachloride			0.500	-28	2.000	2	5.000	9	10.00	-1	20.00	5	50.00	11	75.00	6	100.0	-4
1,2-Dichloroethane			0.500	-1	2.000	1	5.000	-4	10.00	-5	20.00	6	50.00	2	75.00	0	100.0	1
Benzene			0.500	1	2.000	4	5.000	-1	10.00	-6	20.00	6	50.00	1	75.00	-3	100.0	-3
Trichloroethene			0.500	-12	2.000	5	5.000	4	10.00	-5	20.00	2	50.00	-3	75.00	5	100.0	4
1,2-Dichloropropane			0.500	2	2.000	4	5.000	-4	10.00	-6	20.00	4	50.00	0	75.00	0	100.0	0
Bromodichloromethane			0.500	-3	2.000	3	5.000	-5	10.00	-6	20.00	7	50.00	2	75.00	0	100.0	3
Dibromomethane			0.500	-9	2.000	3	5.000	-8	10.00	-6	20.00	9	50.00	4	75.00	3	100.0	5
4-Methyl-2-Pentanone					2.000	1	5.000	-12	10.00	-10	20.00	8	50.00	4	75.00	3	100.0	6
cis-1,3-Dichloropropene			0.500	-3	2.000	2	5.000	-4	10.00	-6	20.00	7	50.00	1	75.00	0	100.0	2
Toluene			0.500	-5	2.000	0	5.000	14	10.00	7	20.00	-1	50.00	-1	75.00	-6	100.0	-9
trans-1,3-Dichloropropene			0.500	-4	2.000	-5	5.000	-7	10.00	-4	20.00	7	50.00	6	75.00	1	100.0	5
1,1,2-Trichloroethane			0.500	-3	2.000	-1	5.000	-7	10.00	-7	20.00	7	50.00	5	75.00	2	100.0	4
2-Hexanone					2.000	5	5.000	-1	10.00	-5	20.00	2	50.00	0	75.00	-3	100.0	1
1,3-Dichloropropane			0.500	-3	2.000	-1	5.000	-8	10.00	-6	20.00	6	50.00	4	75.00	2	100.0	5
Tetrachloroethene			0.500	-18	2.000	8	5.000	5	10.00	-3	20.00	0	50.00	8	75.00	4	100.0	-4
Dibromochloromethane			0.500	-10	2.000	-1	5.000	-7	10.00	-8	20.00	8	50.00	7	75.00	4	100.0	7
1,2-Dibromoethane			0.500	-17	2.000	-2	5.000	-7	10.00	-5	20.00	10	50.00	8	75.00	4	100.0	8
Chlorobenzene			0.500	-1	2.000	5	5.000	-5	10.00	-7	20.00	5	50.00	4	75.00	0	100.0	-1
1,1,1,2-Tetrachloroethane			0.500	-10	2.000	3	5.000	-5	10.00	-7	20.00	5	50.00	6	75.00	5	100.0	4
Ethylbenzene			0.500	-1	2.000	7	5.000	3	10.00	-2	20.00	1	50.00	3	75.00	-3	100.0	-9

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	2	1.000	-4	4.000	5	10.00	6	20.00	1	40.00	0	100.0	3	150.0	-3	200.0	-10
o-Xylene			0.500	-1	2.000	2	5.000	3	10.00	-1	20.00	2	50.00	4	75.00	-2	100.0	-7
Styrene			0.500	-5	2.000	5	5.000	-4	10.00	-4	20.00	6	50.00	5	75.00	-1	100.0	-2
Bromoform			0.500	-13	2.000	-3	5.000	-10	10.00	-5	20.00	9	50.00	9	75.00	6	100.0	8
Isopropylbenzene			0.500	-2	2.000	8	5.000	3	10.00	-3	20.00	-1	50.00	6	75.00	0	100.0	-11
1,1,2,2-Tetrachloroethane			0.500	2	2.000	-3	5.000	-15	10.00	-7	20.00	15	50.00	12	75.00	-3	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	1	5.000	-7	10.00	-6	20.00	7	50.00	2	75.00	-2	100.0	-2
Propylbenzene			0.500	1	2.000	9	5.000	3	10.00	-2	20.00	-1	50.00	5	75.00	-2	100.0	-13
Bromobenzene			0.500	-9	2.000	1	5.000	-3	10.00	-7	20.00	8	50.00	7	75.00	2	100.0	1
1,3,5-Trimethylbenzene			0.500	2	2.000	7	5.000	3	10.00	-3	20.00	1	50.00	3	75.00	-2	100.0	-12
2-Chlorotoluene			0.500	7	2.000	11	5.000	0	10.00	-6	20.00	3	50.00	2	75.00	-4	100.0	-12
4-Chlorotoluene			0.500	9	2.000	10	5.000	-3	10.00	-6	20.00	1	50.00	1	75.00	-3	100.0	-9
tert-Butylbenzene			0.500	-1	2.000	6	5.000	2	10.00	-3	20.00	0	50.00	7	75.00	2	100.0	-12
1,2,4-Trimethylbenzene			0.500	3	2.000	5	5.000	5	10.00	-1	20.00	0	50.00	2	75.00	-4	100.0	-10
sec-Butylbenzene			0.500	-7	2.000	8	5.000	7	10.00	-3	20.00	-2	50.00	7	75.00	1	100.0	-11
para-Isopropyl Toluene			0.500	0	2.000	7	5.000	3	10.00	-4	20.00	-1	50.00	5	75.00	1	100.0	-10
1,3-Dichlorobenzene			0.500	-2	2.000	8	5.000	-2	10.00	-7	20.00	4	50.00	2	75.00	1	100.0	-4
1,4-Dichlorobenzene			0.500	2	2.000	7	5.000	-5	10.00	-6	20.00	5	50.00	3	75.00	-1	100.0	-4
n-Butylbenzene			0.500	2	2.000	7	5.000	3	10.00	-5	20.00	-2	50.00	4	75.00	1	100.0	-11
1,2-Dichlorobenzene			0.500	2	2.000	1	5.000	-5	10.00	-7	20.00	6	50.00	4	75.00	1	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	3	5.000	-16	10.00	-5	20.00	7	50.00	6	75.00	1	100.0	4
1,2,4-Trichlorobenzene			0.500	13	2.000	0	5.000	-8	10.00	-9	20.00	3	50.00	2	75.00	1	100.0	-2
Hexachlorobutadiene					2.000	1	5.000	2	10.00	-8	20.00	-5	50.00	10	75.00	9	100.0	-8
Naphthalene			0.500	-1	2.000	-4	5.000	-9	10.00	-8	20.00	8	50.00	6	75.00	3	100.0	4
1,2,3-Trichlorobenzene			0.500	-4	2.000	-2	5.000	-8	10.00	-8	20.00	7	50.00	6	75.00	5	100.0	4
Dibromofluoromethane	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	3
1,2-Dichloroethane-d4	50.00	3	50.00	3	50.00	3	50.00	-1	50.00	1	50.00	0	50.00	-2	50.00	-3	50.00	-6
Toluene-d8	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	1	50.00	0	50.00	1
Bromofluorobenzene	50.00	1	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	-2

BO 09/09/09 : All manual integrations made due to spliting of peaks, fronting/tailing of peaks.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Cal Date : 09-SEP-2009 Type : WATER

ICV 499363592008 (ji908 09-SEP-2009) stds: S12922 (10000X), S12589 (10000X), S12693 (10000X), S12845 (10000X), S12692 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	29.32	ug/L	17	25	
Chloromethane	25.00	24.90	ug/L	0	25	
Vinyl Chloride	25.00	26.28	ug/L	5	25	
Bromomethane	25.00	31.48	ug/L	**26**	25	v+
Chloroethane	25.00	27.31	ug/L	9	25	
Trichlorofluoromethane	25.00	28.98	ug/L	16	25	
Acetone	25.00	18.24	ug/L	-27	25	v-
1,1-Dichloroethene	25.00	28.82	ug/L	15	25	
Iodomethane	25.00	31.45	ug/L	**26**	25	v+
Methylene Chloride	25.00	26.17	ug/L	5	25	
Carbon Disulfide	25.00	26.03	ug/L	4	25	
MTBE	25.00	24.63	ug/L	-1	25	
trans-1,2-Dichloroethene	25.00	28.76	ug/L	15	25	
Vinyl Acetate	25.00	38.34	ug/L	**53**	25	v+
1,1-Dichloroethane	25.00	26.61	ug/L	6	25	
2-Butanone	25.00	22.86	ug/L	-9	25	
2,2-Dichloropropane	25.00	36.55	ug/L	**46**	25	v+
cis-1,2-Dichloroethene	25.00	26.30	ug/L	5	25	
Chloroform	25.00	26.11	ug/L	4	25	
Bromochloromethane	25.00	27.34	ug/L	9	25	
1,1,1-Trichloroethane	25.00	28.43	ug/L	14	25	
1,1-Dichloropropene	25.00	29.41	ug/L	18	25	
Carbon Tetrachloride	25.00	30.22	ug/L	**21**	25	
1,2-Dichloroethane	25.00	27.43	ug/L	10	25	
Benzene	25.00	27.27	ug/L	9	25	
Trichloroethene	25.00	26.38	ug/L	6	25	
1,2-Dichloropropane	25.00	26.11	ug/L	4	25	
Bromodichloromethane	25.00	27.62	ug/L	10	25	
Dibromomethane	25.00	27.33	ug/L	9	25	
4-Methyl-2-Pentanone	25.00	26.31	ug/L	5	25	
cis-1,3-Dichloropropene	25.00	29.76	ug/L	19	25	
Toluene	25.00	26.06	ug/L	4	25	
trans-1,3-Dichloropropene	25.00	26.81	ug/L	7	25	
1,1,2-Trichloroethane	25.00	27.24	ug/L	9	25	
2-Hexanone	25.00	24.55	ug/L	-2	25	
1,3-Dichloropropane	25.00	27.44	ug/L	10	25	
Tetrachloroethene	25.00	29.54	ug/L	18	25	
Dibromochloromethane	25.00	27.93	ug/L	12	25	
1,2-Dibromoethane	25.00	27.99	ug/L	12	25	
Chlorobenzene	25.00	27.18	ug/L	9	25	
1,1,1,2-Tetrachloroethane	25.00	28.01	ug/L	12	25	
Ethylbenzene	25.00	27.83	ug/L	11	25	
m,p-Xylenes	50.00	55.10	ug/L	10	25	
o-Xylene	25.00	27.21	ug/L	9	25	
Styrene	25.00	27.51	ug/L	10	25	
Bromoform	25.00	27.68	ug/L	11	25	
Isopropylbenzene	25.00	25.46	ug/L	2	25	
1,1,2,2-Tetrachloroethane	25.00	29.72	ug/L	19	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	27.54	ug/L	10	25	
Propylbenzene	25.00	28.98	ug/L	16	25	
Bromobenzene	25.00	27.73	ug/L	11	25	
1,3,5-Trimethylbenzene	25.00	28.85	ug/L	15	25	
2-Chlorotoluene	25.00	28.27	ug/L	13	25	
4-Chlorotoluene	25.00	27.28	ug/L	9	25	
tert-Butylbenzene	25.00	29.55	ug/L	18	25	
1,2,4-Trimethylbenzene	25.00	28.01	ug/L	12	25	
sec-Butylbenzene	25.00	30.70	ug/L	**23**	25	
para-Isopropyl Toluene	25.00	29.18	ug/L	17	25	
1,3-Dichlorobenzene	25.00	27.77	ug/L	11	25	
1,4-Dichlorobenzene	25.00	27.38	ug/L	10	25	
n-Butylbenzene	25.00	31.80	ug/L	**27**	25	v+
1,2-Dichlorobenzene	25.00	27.52	ug/L	10	25	
1,2-Dibromo-3-Chloropropane	25.00	28.72	ug/L	15	25	
1,2,4-Trichlorobenzene	25.00	27.62	ug/L	10	25	
Hexachlorobutadiene	25.00	32.03	ug/L	**28**	25	v+
Naphthalene	25.00	28.17	ug/L	13	25	
1,2,3-Trichlorobenzene	25.00	29.05	ug/L	16	25	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215065 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	-24	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	21	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	35	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	-23	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	97	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	41	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	24	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	-22	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC514129 IDF : 1.0
Seqnum : 499392292003.5 File : jit03 Time : 29-SEP-2009 11:51
Cal : 499361940002 Caldate : 09-SEP-2009 Caltype : WATER
Standards: S12922 (13330X), S12996 (13330X), S12693 (13330X), S13008 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6722	0.9285	18.75	25.90	ug/L	**38**	20	0.0500	c+ u ***
Chloromethane	1.3456	1.2261	18.75	17.08	ug/L	-9	20	0.1000	u
Vinyl Chloride	0.9782	1.0073	18.75	19.31	ug/L	3	20	0.0500	u
Bromomethane	0.5070	0.3157	18.75	11.68	ug/L	**-38**	20	0.0500	c- u v+ ***
Chloroethane	0.5684	0.5916	18.75	19.51	ug/L	4	20	0.0500	u
Trichlorofluoromethane	0.7017	0.8564	18.75	22.89	ug/L	**22**	20	0.0500	c+ u ***
Iodomethane	0.4848	0.4320	18.75	15.40	ug/L	-18	20	0.0500	u v+ ***
Acetone	0.3243	0.3389	18.75	19.59	ug/L	4	20	0.0500	u v- ***
1,1-Dichloroethene	0.4750	0.5317	18.75	20.99	ug/L	12	20	0.0500	u
Methylene Chloride	0.7214	0.7559	18.75	19.65	ug/L	5	20	0.0500	u
Carbon Disulfide	2.1545	2.1335	18.75	18.57	ug/L	-1	20	0.0500	u
MTBE	1.8042	1.8206	18.75	18.92	ug/L	1	20	0.0500	u
trans-1,2-Dichloroethene	0.5607	0.6398	18.75	21.40	ug/L	14	20	0.0500	u
Vinyl Acetate	1.4763	2.2443	18.75	28.50	ug/L	**52**	20	0.0500	c+ rsd u v+ ***
1,1-Dichloroethane	1.3302	1.4814	18.75	20.88	ug/L	11	20	0.1000	u
2-Butanone	0.4512	0.4638	18.75	19.28	ug/L	3	20	0.0500	u
cis-1,2-Dichloroethene	0.6508	0.6998	18.75	20.16	ug/L	8	20	0.0500	u
2,2-Dichloropropane	0.6245	0.9778	18.75	29.36	ug/L	**57**	20	0.0500	c+ u v+ ***
Chloroform	1.1050	1.2078	18.75	20.49	ug/L	9	20	0.0500	u
Bromochloromethane	0.2966	0.3329	18.75	21.05	ug/L	12	20	0.0500	u
1,1,1-Trichloroethane	0.6684	0.8231	18.75	23.09	ug/L	**23**	20	0.0500	c+ u ***
1,1-Dichloropropene	0.4771	0.5925	18.75	23.29	ug/L	**24**	20	0.0500	c+ u ***
Carbon Tetrachloride	0.3093	0.3941	18.75	23.89	ug/L	**27**	20	0.0500	c+ u ***
1,2-Dichloroethane	0.5373	0.6200	18.75	21.63	ug/L	15	20	0.0500	u
Benzene	1.4764	1.6516	18.75	20.98	ug/L	12	20	0.0500	u
Trichloroethene	0.3563	0.3859	18.75	20.31	ug/L	8	20	0.0500	u
1,2-Dichloropropane	0.4879	0.5333	18.75	20.49	ug/L	9	20	0.0500	u
Bromodichloromethane	0.4922	0.5556	18.75	21.17	ug/L	13	20	0.0500	u
Dibromomethane	0.2437	0.2705	18.75	20.81	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.5464	0.6005	18.75	20.61	ug/L	10	20	0.0500	u
cis-1,3-Dichloropropene	0.6236	0.7529	18.75	22.64	ug/L	**21**	20	0.0500	c+ u ***
Toluene	1.0349	1.0918	18.75	19.78	ug/L	5	20	0.0500	u
trans-1,3-Dichloropropene	0.6910	0.7555	18.75	20.50	ug/L	9	20	0.0500	u
1,1,2-Trichloroethane	0.2224	0.2543	18.75	21.44	ug/L	14	20	0.0500	u
2-Hexanone	0.4858	0.5262	18.75	20.31	ug/L	8	20	0.0500	u
1,3-Dichloropropane	0.7051	0.8125	18.75	21.61	ug/L	15	20	0.0500	u
Tetrachloroethene	0.3459	0.4133	18.75	22.40	ug/L	19	20	0.0500	u
Dibromochloromethane	0.3954	0.4497	18.75	21.32	ug/L	14	20	0.0500	u
1,2-Dibromoethane	0.3869	0.4373	18.75	21.19	ug/L	13	20	0.0500	u
Chlorobenzene	1.0346	1.1408	18.75	20.67	ug/L	10	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3459	0.3955	18.75	21.44	ug/L	14	20	0.0500	u
Ethylbenzene	1.8635	2.1304	18.75	21.44	ug/L	14	20	0.0500	u
m,p-Xylenes	0.6570	0.7396	37.50	42.22	ug/L	13	20	0.0500	u
o-Xylene	0.6512	0.7127	18.75	20.52	ug/L	9	20	0.0500	u
Styrene	1.1888	1.3086	18.75	20.64	ug/L	10	20	0.0500	u
Bromoform	0.2714	0.2977	18.75	20.57	ug/L	10	20	0.1000	u
Isopropylbenzene	3.2665	3.3382	18.75	19.16	ug/L	2	20	0.0500	u
1,1,2,2-Tetrachloroethane	0.9412	1.1376	18.75	22.66	ug/L	**21**	20	0.3000	c+ u ***

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,2,3-Trichloropropane	0.9136	1.0508	18.75	21.57	ug/L	15	20	0.0500	u
Propylbenzene	4.2647	5.0820	18.75	22.34	ug/L	19	20	0.0500	u
Bromobenzene	0.8845	0.9800	18.75	20.77	ug/L	11	20	0.0500	u
1,3,5-Trimethylbenzene	2.7013	3.1551	18.75	21.90	ug/L	17	20	0.0500	u
2-Chlorotoluene	2.8907	3.3442	18.75	21.69	ug/L	16	20	0.0500	u
4-Chlorotoluene	2.7428	3.0522	18.75	20.86	ug/L	11	20	0.0500	u
tert-Butylbenzene	2.1224	2.5068	18.75	22.15	ug/L	18	20	0.0500	u
1,2,4-Trimethylbenzene	2.7905	3.1356	18.75	21.07	ug/L	12	20	0.0500	u
sec-Butylbenzene	3.2955	4.0528	18.75	23.06	ug/L	**23**	20	0.0500	c+ u ***
para-Isopropyl Toluene	2.5799	2.9767	18.75	21.63	ug/L	15	20	0.0500	u
1,3-Dichlorobenzene	1.5676	1.7193	18.75	20.56	ug/L	10	20	0.0500	u
1,4-Dichlorobenzene	1.6423	1.7963	18.75	20.51	ug/L	9	20	0.0500	u
n-Butylbenzene	2.5751	3.2608	18.75	23.74	ug/L	**27**	20	0.0500	c+ u v+ ***
1,2-Dichlorobenzene	1.4998	1.6483	18.75	20.61	ug/L	10	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1600	0.1769	18.75	20.73	ug/L	11	20	0.0500	u
1,2,4-Trichlorobenzene	0.8867	0.9240	18.75	19.54	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.2858	0.3469	18.75	22.76	ug/L	**21**	20	0.0500	c+ u v+ ***
Naphthalene	1.8902	2.1741	18.75	21.57	ug/L	15	20	0.0500	u
1,2,3-Trichlorobenzene	0.7534	0.8295	18.75	20.64	ug/L	10	20	0.0500	u
Dibromofluoromethane	0.5675	0.5897	50.00	51.96	ug/L	4	20	0.0500	u
1,2-Dichloroethane-d4	0.3948	0.4386	50.00	55.55	ug/L	11	20	0.0500	u
Toluene-d8	1.4119	1.4354	50.00	50.83	ug/L	2	20	0.0500	u
Bromofluorobenzene	1.0845	1.0875	50.00	50.14	ug/L	0	20	0.0500	u

ISTD (ICAL ji818)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	520002	808155	55.41	11.03	11.02	-0.01
1,4-Difluorobenzene	857205	1322993	54.34	12.19	12.18	-0.01
Chlorobenzene-d5	685604	1069630	56.01	16.09	16.08	-0.01
1,4-Dichlorobenzene-d4	340706	530719	55.77	18.79	18.79	0.00

5% spike rule

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC514373 IDF : 1.0
Seqnum : 499393725004.3 File : jiu04 Time : 30-SEP-2009 11:33
Cal : 499361940002 Caldate : 09-SEP-2009 Caltype : WATER
Standards: S12922 (13330X), S12996 (13330X), S12693 (13330X), S13008 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6722	0.7234	18.75	20.18	ug/L	8	20	0.0500	u
Chloromethane	1.3456	1.1616	18.75	16.19	ug/L	-14	20	0.1000	u
Vinyl Chloride	0.9782	0.9241	18.75	17.71	ug/L	-6	20	0.0500	u
Bromomethane	0.5070	0.3463	18.75	12.81	ug/L	**-32**	20	0.0500	c- u v+ ***
Chloroethane	0.5684	0.5579	18.75	18.40	ug/L	-2	20	0.0500	u
Trichlorofluoromethane	0.7017	0.7912	18.75	21.14	ug/L	13	20	0.0500	u
Iodomethane	0.4848	0.4979	18.75	17.40	ug/L	-7	20	0.0500	u v+ ***
Acetone	0.3243	0.2599	18.75	15.03	ug/L	-20	20	0.0500	u v- ***
1,1-Dichloroethene	0.4750	0.5159	18.75	20.36	ug/L	9	20	0.0500	u
Methylene Chloride	0.7214	0.7335	18.75	19.06	ug/L	2	20	0.0500	u
Carbon Disulfide	2.1545	2.0429	18.75	17.78	ug/L	-5	20	0.0500	u
MTBE	1.8042	1.8269	18.75	18.99	ug/L	1	20	0.0500	u
trans-1,2-Dichloroethene	0.5607	0.6146	18.75	20.55	ug/L	10	20	0.0500	u
Vinyl Acetate	1.4763	2.1349	18.75	27.11	ug/L	**45**	20	0.0500	c+ rsd u v+ ***
1,1-Dichloroethane	1.3302	1.4198	18.75	20.01	ug/L	7	20	0.1000	u
2-Butanone	0.4512	0.4133	18.75	17.18	ug/L	-8	20	0.0500	u
cis-1,2-Dichloroethene	0.6508	0.6672	18.75	19.22	ug/L	3	20	0.0500	u
2,2-Dichloropropane	0.6245	0.9174	18.75	27.54	ug/L	**47**	20	0.0500	c+ u v+ ***
Chloroform	1.1050	1.1705	18.75	19.86	ug/L	6	20	0.0500	u
Bromochloromethane	0.2966	0.3168	18.75	20.03	ug/L	7	20	0.0500	u
1,1,1-Trichloroethane	0.6684	0.7894	18.75	22.15	ug/L	18	20	0.0500	u
1,1-Dichloropropene	0.4771	0.5598	18.75	22.00	ug/L	17	20	0.0500	u
Carbon Tetrachloride	0.3093	0.3719	18.75	22.55	ug/L	20	20	0.0500	u
1,2-Dichloroethane	0.5373	0.5869	18.75	20.48	ug/L	9	20	0.0500	u
Benzene	1.4764	1.5678	18.75	19.91	ug/L	6	20	0.0500	u
Trichloroethene	0.3563	0.3707	18.75	19.51	ug/L	4	20	0.0500	u
1,2-Dichloropropane	0.4879	0.5196	18.75	19.97	ug/L	6	20	0.0500	u
Bromodichloromethane	0.4922	0.5394	18.75	20.55	ug/L	10	20	0.0500	u
Dibromomethane	0.2437	0.2698	18.75	20.75	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.5464	0.5745	18.75	19.71	ug/L	5	20	0.0500	u
cis-1,3-Dichloropropene	0.6236	0.7210	18.75	21.68	ug/L	16	20	0.0500	u
Toluene	1.0349	1.0740	18.75	19.46	ug/L	4	20	0.0500	u
trans-1,3-Dichloropropene	0.6910	0.7306	18.75	19.82	ug/L	6	20	0.0500	u
1,1,2-Trichloroethane	0.2224	0.2426	18.75	20.45	ug/L	9	20	0.0500	u
2-Hexanone	0.4858	0.4945	18.75	19.09	ug/L	2	20	0.0500	u
1,3-Dichloropropane	0.7051	0.7755	18.75	20.62	ug/L	10	20	0.0500	u
Tetrachloroethene	0.3459	0.4042	18.75	21.91	ug/L	17	20	0.0500	u
Dibromochloromethane	0.3954	0.4349	18.75	20.62	ug/L	10	20	0.0500	u
1,2-Dibromoethane	0.3869	0.4302	18.75	20.85	ug/L	11	20	0.0500	u
Chlorobenzene	1.0346	1.1191	18.75	20.28	ug/L	8	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3459	0.3848	18.75	20.86	ug/L	11	20	0.0500	u
Ethylbenzene	1.8635	2.0879	18.75	21.01	ug/L	12	20	0.0500	u
m,p-Xylenes	0.6570	0.7265	37.50	41.47	ug/L	11	20	0.0500	u
o-Xylene	0.6512	0.7108	18.75	20.46	ug/L	9	20	0.0500	u
Styrene	1.1888	1.2814	18.75	20.21	ug/L	8	20	0.0500	u
Bromoform	0.2714	0.2873	18.75	19.85	ug/L	6	20	0.1000	u
Isopropylbenzene	3.2665	3.2725	18.75	18.78	ug/L	0	20	0.0500	u
1,1,2,2-Tetrachloroethane	0.9412	1.1004	18.75	21.92	ug/L	17	20	0.3000	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,2,3-Trichloropropane	0.9136	1.0177	18.75	20.89	ug/L	11	20	0.0500	u
Propylbenzene	4.2647	4.9504	18.75	21.76	ug/L	16	20	0.0500	u
Bromobenzene	0.8845	0.9453	18.75	20.04	ug/L	7	20	0.0500	u
1,3,5-Trimethylbenzene	2.7013	3.0572	18.75	21.22	ug/L	13	20	0.0500	u
2-Chlorotoluene	2.8907	3.2217	18.75	20.90	ug/L	11	20	0.0500	u
4-Chlorotoluene	2.7428	2.9670	18.75	20.28	ug/L	8	20	0.0500	u
tert-Butylbenzene	2.1224	2.4665	18.75	21.79	ug/L	16	20	0.0500	u
1,2,4-Trimethylbenzene	2.7905	3.0694	18.75	20.62	ug/L	10	20	0.0500	u
sec-Butylbenzene	3.2955	3.9875	18.75	22.69	ug/L	**21**	20	0.0500	c+ u ***
para-Isopropyl Toluene	2.5799	2.8901	18.75	21.00	ug/L	12	20	0.0500	u
1,3-Dichlorobenzene	1.5676	1.6832	18.75	20.13	ug/L	7	20	0.0500	u
1,4-Dichlorobenzene	1.6423	1.7512	18.75	19.99	ug/L	7	20	0.0500	u
n-Butylbenzene	2.5751	3.1603	18.75	23.01	ug/L	**23**	20	0.0500	c+ u v+ ***
1,2-Dichlorobenzene	1.4998	1.6101	18.75	20.13	ug/L	7	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1600	0.1742	18.75	20.41	ug/L	9	20	0.0500	u
1,2,4-Trichlorobenzene	0.8867	0.9219	18.75	19.50	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.2858	0.3384	18.75	22.20	ug/L	18	20	0.0500	u v+ ***
Naphthalene	1.8902	2.1550	18.75	21.38	ug/L	14	20	0.0500	u
1,2,3-Trichlorobenzene	0.7534	0.8143	18.75	20.26	ug/L	8	20	0.0500	u
Dibromofluoromethane	0.5675	0.5868	50.00	51.70	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3948	0.4301	50.00	54.47	ug/L	9	20	0.0500	u
Toluene-d8	1.4119	1.4366	50.00	50.87	ug/L	2	20	0.0500	u
Bromofluorobenzene	1.0845	1.0882	50.00	50.17	ug/L	0	20	0.0500	u

ISTD (ICAL ji818)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	520002	822307	58.14	11.03	11.00	-0.03
1,4-Difluorobenzene	857205	1354780	58.05	12.19	12.16	-0.03
Chlorobenzene-d5	685604	1098588	60.24	16.09	16.07	-0.02
1,4-Dichlorobenzene-d4	340706	546800	60.49	18.79	18.77	-0.02

5% spike rule

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215065 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC513941 IDF : 1.0
Seqnum : 839390808006.1 File : kis06 Time : 28-SEP-2009 11:51
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.6621	25.00	30.91	ug/L	**24**	20	0.0500	c+ u ***
Chloromethane	0.5160	0.5753	25.00	27.87	ug/L	11	20	0.1000	u
Vinyl Chloride	0.5175	0.5976	25.00	28.87	ug/L	15	20	0.0500	u
Bromomethane	0.2608	0.3480	25.00	33.37	ug/L	**33**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.4906	25.00	29.96	ug/L	20	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8748	25.00	29.49	ug/L	18	20	0.0500	u
Iodomethane	0.2599	0.4098	25.00	37.51	ug/L	**50**	20	0.0500	c+ u ***
Acetone	0.1382	0.1856	25.00	33.58	ug/L	**34**	20	0.0500	c+ u ***
1,1-Dichloroethene	0.3747	0.4272	25.00	28.50	ug/L	14	20	0.0500	u
Methylene Chloride	0.5280	0.6079	25.00	28.78	ug/L	15	20	0.0500	u
Carbon Disulfide	1.4090	1.5260	25.00	27.08	ug/L	8	20	0.0500	u
MTBE	1.5447	1.7382	25.00	28.13	ug/L	13	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5591	25.00	30.63	ug/L	**23**	20	0.0500	c+ u ***
Vinyl Acetate	0.9726	0.9610	25.00	24.70	ug/L	-1	20	0.0500	u
1,1-Dichloroethane	0.9405	1.1149	25.00	29.64	ug/L	19	20	0.1000	u
2-Butanone	0.2331	0.2792	25.00	29.94	ug/L	20	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6390	25.00	29.36	ug/L	17	20	0.0500	u
2,2-Dichloropropane	0.7134	0.8483	25.00	29.73	ug/L	19	20	0.0500	u
Chloroform	0.9238	1.0390	25.00	28.12	ug/L	12	20	0.0500	u
Bromochloromethane	0.2354	0.2822	25.00	29.97	ug/L	20	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.8116	25.00	28.85	ug/L	15	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4429	25.00	26.26	ug/L	5	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3512	25.00	25.20	ug/L	1	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4454	25.00	25.35	ug/L	1	20	0.0500	u
Benzene	1.3404	1.4763	25.00	27.53	ug/L	10	20	0.0500	u
Trichloroethene	0.3158	0.3572	25.00	28.28	ug/L	13	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3866	25.00	26.88	ug/L	8	20	0.0500	u
Bromodichloromethane	0.3863	0.4230	25.00	27.37	ug/L	9	20	0.0500	u
Dibromomethane	0.1802	0.1909	25.00	26.49	ug/L	6	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2898	25.00	23.80	ug/L	-5	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.6071	25.00	29.37	ug/L	17	20	0.0500	u
Toluene	0.9593	0.9506	25.00	24.77	ug/L	-1	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5383	25.00	23.48	ug/L	-6	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1810	25.00	25.87	ug/L	3	20	0.0500	u
2-Hexanone	0.2445	0.2303	25.00	23.55	ug/L	-6	20	0.0500	u
1,3-Dichloropropane	0.6133	0.6356	25.00	25.91	ug/L	4	20	0.0500	u
Tetrachloroethene	0.3329	0.3086	25.00	23.18	ug/L	-7	20	0.0500	u
Dibromochloromethane	0.3027	0.3021	25.00	24.95	ug/L	0	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3019	25.00	24.76	ug/L	-1	20	0.0500	u
Chlorobenzene	1.0519	1.0294	25.00	24.47	ug/L	-2	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3247	25.00	24.18	ug/L	-3	20	0.0500	u
Ethylbenzene	1.8115	1.8299	25.00	25.25	ug/L	1	20	0.0500	u
m,p-Xylenes	0.6304	0.6111	50.00	48.47	ug/L	-3	20	0.0500	u
o-Xylene	0.6283	0.5907	25.00	23.51	ug/L	-6	20	0.0500	u
Styrene	1.0367	1.0190	25.00	24.57	ug/L	-2	20	0.0500	u
Bromoform	0.1849	0.1944	25.00	22.78	ug/L	-9	20	0.1000	u
Isopropylbenzene	3.8595	3.6704	25.00	23.77	ug/L	-5	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9801	25.00	25.56	ug/L	2	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.2508	25.00	30.55	ug/L	**22**	20	0.0500	c+ u ***
Propylbenzene	3.9448	3.8833	25.00	24.61	ug/L	-2	20	0.0500	u
Bromobenzene	1.0220	1.1045	25.00	27.02	ug/L	8	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.2336	25.00	29.48	ug/L	18	20	0.0500	u
2-Chlorotoluene	3.1099	3.5116	25.00	28.23	ug/L	13	20	0.0500	u
4-Chlorotoluene	2.6572	2.7809	25.00	26.16	ug/L	5	20	0.0500	u
tert-Butylbenzene	2.1712	1.9029	25.00	21.91	ug/L	-12	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.2523	25.00	30.82	ug/L	**23**	20	0.0500	c+ u ***
sec-Butylbenzene	3.1284	2.8709	25.00	22.94	ug/L	-8	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.6639	25.00	26.70	ug/L	7	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6964	25.00	25.09	ug/L	0	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.6104	25.00	24.34	ug/L	-3	20	0.0500	u
n-Butylbenzene	2.4331	3.0603	25.00	41.49	ug/L	**66**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6453	25.00	25.52	ug/L	2	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1872	25.00	26.60	ug/L	6	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.2239	25.00	28.13	ug/L	13	20	0.0500	u
Hexachlorobutadiene	0.4373	0.4248	25.00	24.28	ug/L	-3	20	0.0500	u
Naphthalene	2.7279	3.4162	25.00	31.31	ug/L	**25**	20	0.0500	c+ u ***
1,2,3-Trichlorobenzene	1.0079	1.1958	25.00	29.66	ug/L	19	20	0.0500	u
Dibromofluoromethane	0.4472	0.4822	50.00	53.91	ug/L	8	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3661	50.00	48.98	ug/L	-2	20	0.0500	u
Toluene-d8	1.4811	1.4755	50.00	49.81	ug/L	0	20	0.0500	u
Bromofluorobenzene	1.2424	1.4047	50.00	56.53	ug/L	13	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	2061753	36.97	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3799909	55.29	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3615978	69.27	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1270159	29.15	17.10	17.10	0.00

5% spike rule

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 499392292

Date : 09/29/09 Reference : ji818
Sequence : MSVOA10 jit Analyzed : 09/09/09 06:08

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	520002	11.03	857205	12.19	685604	16.09	340706	18.79
		LOWER LIMIT	260001	10.53	428603	11.69	342802	15.59	170353	18.29
		UPPER LIMIT	1040004	11.53	1714410	12.69	1371208	16.59	681412	19.29
003	CCV/BS	QC514129	808155	11.02	1322993	12.18	1069630	16.08	530719	18.79
004	BSD	QC514130	809459	11.02	1331938	12.18	1071137	16.09	536168	18.78
006	BLANK	QC514128	801824	11.02	1315420	12.18	1081998	16.08	530861	18.79
007	SAMPLE	215152-003	865733	11.02	1392022	12.17	1137179	16.08	563852	18.79
008	SAMPLE	215063-001	818869	11.02	1330168	12.18	1094727	16.08	541391	18.79
009	SAMPLE	215063-002	796665	11.03	1304673	12.18	1061168	16.09	522041	18.79
010	SAMPLE	215063-003	816504	11.02	1332032	12.18	1086783	16.09	535335	18.79
011	SAMPLE	215063-004	830575	11.02	1376842	12.18	1119550	16.08	542379	18.79
012	SAMPLE	215063-005	825662	11.02	1371824	12.18	1101567	16.08	534512	18.79
013	SAMPLE	215063-006	865532	11.03	1427950	12.18	1150734	16.09	563004	18.78
014	SAMPLE	215063-007	871251	11.03	1425773	12.18	1165595	16.09	568207	18.78
015	SAMPLE	215063-008	885940	11.03	1455552	12.19	1190247	16.09	583516	18.78
016	SAMPLE	215065-005	866326	11.03	1424844	12.19	1184685	16.09	575694	18.79
017	SAMPLE	215065-006	800033	11.03	1342885	12.19	1091956	16.09	524214	18.79
018	SAMPLE	215065-008	884571	11.03	1464066	12.19	1179447	16.09	574155	18.78
019	SAMPLE	215065-009	849813	11.03	1406879	12.18	1133347	16.08	561943	18.78
020	SAMPLE	215065-011	812271	11.03	1354536	12.18	1113022	16.08	541659	18.78

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 499393725

Date : 09/30/09 Reference : ji818
Sequence : MSVOA10 jiu Analyzed : 09/09/09 06:08

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	520002	11.03	857205	12.19	685604	16.09	340706	18.79
		LOWER LIMIT	260001	10.53	428603	11.69	342802	15.59	170353	18.29
		UPPER LIMIT	1040004	11.53	1714410	12.69	1371208	16.59	681412	19.29
004	CCV/BS	QC514373	822307	11.00	1354780	12.16	1098588	16.07	546800	18.77
005	BSD	QC514374	828976	11.01	1350923	12.16	1081522	16.07	551652	18.78
007	BLANK	QC514372	868047	11.01	1404794	12.17	1156657	16.08	567456	18.77
008	SAMPLE	215170-001	866585	11.00	1401432	12.16	1141130	16.07	556469	18.78
009	SAMPLE	215065-007	838766	11.01	1365462	12.17	1118875	16.08	545503	18.78
010	SAMPLE	215065-010	843561	11.01	1380195	12.17	1108483	16.08	549723	18.77
011	SAMPLE	215065-008	833347	11.00	1360631	12.16	1101916	16.07	538894	18.78
012	SAMPLE	215170-002	841843	11.01	1380778	12.17	1101296	16.08	547900	18.78
013	SAMPLE	215072-002	787885	11.01	1307218	12.17	1060925	16.08	518543	18.78
014	MSS	215072-003	822398	11.00	1365647	12.16	1099665	16.07	537151	18.78
015	SAMPLE	215072-004	809628	11.02	1341442	12.17	1094653	16.08	535739	18.78
016	SAMPLE	215072-009	842645	11.01	1391887	12.17	1127317	16.08	554500	18.78
017	SAMPLE	215072-010	838374	11.02	1385983	12.18	1137324	16.08	556369	18.78
018	SAMPLE	215072-005	817694	11.02	1351646	12.18	1106521	16.09	535965	18.78
019	SAMPLE	215072-006	733368	11.03	1243149	12.19	1003455	16.10	482006	18.80
020	SAMPLE	215072-007	819077	11.02	1364189	12.18	1103553	16.08	543705	18.78
021	SAMPLE	215072-008	837936	11.02	1367912	12.18	1122281	16.08	556648	18.78
022	SAMPLE	215072-011	810275	11.02	1351365	12.18	1104732	16.09	540821	18.78
023	MS	QC514447	769107	11.02	1297965	12.18	1047434	16.08	515448	18.78
024	MSD	QC514448	843407	11.02	1359745	12.18	1092407	16.08	546184	18.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839390808

Date : 09/28/09 Reference : kif12
Sequence : MSVOA11 kis Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
006	CCV/LCS	QC513941	2061753	10.81	3799909	11.74	3615978	14.82	1270159	17.10
008	BLANK	QC513940	1983921	10.81	3713942	11.74	3429714	14.82	1012702	17.09
009	SAMPLE	215201-001	1982487	10.81	3754318	11.74	3486795	14.82	1081602	17.10
010	SAMPLE	215201-003	1922628	10.82	3608860	11.74	3362960	14.82	1022813	17.10
011	SAMPLE	215201-004	1913647	10.81	3645804	11.74	3393228	14.82	990559	17.10
012	SAMPLE	215113-003	1914188	10.81	3598134	11.74	3367830	14.82	1038364	17.10
013	SAMPLE	215113-002	1884683	10.81	3592098	11.74	3322338	14.83	1059952	17.10
014	SAMPLE	215113-004	1872129	10.81	3572558	11.74	3347700	14.82	1085687	17.10
015	SAMPLE	215113-005	1808370	10.81	3420839	11.74	3186571	14.82	1007170	17.10
016	MSS	215113-006	1780770	10.81	3395719	11.74	3176536	14.82	972932	17.10
017	SAMPLE	215113-007	1734747	10.81	3331138	11.74	3116025	14.83	961814	17.10
018	SAMPLE	215113-008	1725772	10.81	3345618	11.74	3124945	14.83	984169	17.10
019	SAMPLE	215113-009	1675873	10.81	3236490	11.74	3009021	14.83	908193	17.10
020	SAMPLE	215113-010	1703866	10.81	3279279	11.74	3105522	14.82	970508	17.10
021	SAMPLE	215113-011	1693517	10.81	3247449	11.74	3034205	14.82	923668	17.10
022	SAMPLE	215065-001	1708425	10.81	3310876	11.74	3059197	14.83	972817	17.10
023	SAMPLE	215065-002	1692350	10.81	3289132	11.74	3077105	14.82	1024028	17.10
024	SAMPLE	215065-003	1660576	10.81	3211796	11.74	3020799	14.82	930929	17.10
025	SAMPLE	215065-004	1666097	10.81	3220354	11.74	3039699	14.82	921520	17.10
026	MS	QC513986	1723996	10.81	3284909	11.74	3223891	14.82	1179758	17.10
027	MSD	QC513987	1834321	10.81	3476080	11.74	3373379	14.82	1095308	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499361940

Instrument : MSVOA10 Begun : 09/08/09 08:20
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji801	X	IB			09/08/09 08:20	1.0	1	
002	ji802	X	IB			09/08/09 08:54	1.0	1	
003	ji803	X	IB			09/08/09 12:48	1.0	1	
004	ji804	X	LOW PT			09/08/09 13:23	1.0	1	
005	ji805	X	IB			09/08/09 16:27	1.0	1	
006	ji806	X	LOW PT			09/08/09 17:01	1.0	1	
007	ji807	TUN	BFB			09/08/09 18:22	1.0	2	
008	ji808	TUN	BFB			09/09/09 00:19	1.0	2	
009	ji809	X	IB BAKE			09/09/09 00:42	1.0	1	
010	ji810	X	IB			09/09/09 01:33	1.0	1	
011	ji811	IB	CALIB IB			09/09/09 02:08	1.0	1	
012	ji812	ICAL	.25/0.5PPB			09/09/09 02:42	1.0	3 4 5 6 1	
013	ji813	ICAL	0.5/1PPB			09/09/09 03:16	1.0	3 4 5 6 1	
014	ji814	ICAL	2PPB			09/09/09 03:51	1.0	3 4 5 6 1	
015	ji815	ICAL	5PPB			09/09/09 04:25	1.0	3 4 5 6 1	
016	ji816	ICAL	10PPB			09/09/09 04:59	1.0	3 4 5 6 1	
017	ji817	ICAL	20PPB			09/09/09 05:34	1.0	3 4 5 6 1	
018	ji818	ICAL	50PPB			09/09/09 06:08	1.0	3 4 5 6 1	
019	ji819	ICAL	75PPB			09/09/09 06:42	1.0	3 4 5 6 1	
020	ji820	ICAL	100PPB			09/09/09 07:17	1.0	3 4 5 6 1	

BO 09/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

Standards used: 1=S12692 2=S12404 3=S12733 4=S12773 5=S12217 6=S12685

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499363592

Instrument : MSVOA10 Begun : 09/09/09 11:52
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji901	X	BFB			09/09/09 11:52	1.0	1	
002	ji902	X	BFB			09/09/09 12:05	1.0	1	
003	ji903	X	BFB			09/09/09 12:25	1.0	1	
004	ji904	X	BFB			09/09/09 13:31	1.0	1	
005	ji905	X	20PPB			09/09/09 14:02	1.0	2 3 4 5 6	
006	ji906	TUN	BFB			09/09/09 14:47	1.0	1	
007	ji907	CCV	20PPB			09/09/09 15:04	1.0	2 3 4 5 6	
008	ji908	ICV/BS	QC511299	Water	154716	09/09/09 16:12	1.0	7 8 9 10 6	
009	ji909	X	QC511300	Water	154716	09/09/09 16:47	1.0	7 8 9 10 6	
010	ji910	X	IB			09/09/09 17:20	1.0	6	
011	ji911	BSD	QC511300	Water	154716	09/09/09 17:55	1.0	6 7 8 9 10	
012	ji912	X	IB			09/09/09 18:28	1.0	6	
013	ji913	BLANK	QC511301	Water	154716	09/09/09 19:03	1.0	6	
014	ji914	SAMPLE	214564-003	Water	154716	09/09/09 19:37	1.0	6	
015	ji915	SAMPLE	214552-017	Water	154716	09/09/09 20:11	1.0	6	
016	ji916	SAMPLE	214664-001	Water	154716	09/09/09 20:45	1.0	6	
017	ji917	SAMPLE	214574-008	Water	154716	09/09/09 21:19	1.0	6	
018	ji918	SAMPLE	214574-007	Water	154716	09/09/09 21:53	1.0	6	
019	ji919	SAMPLE	214574-009	Water	154716	09/09/09 22:27	1.0	6	
020	ji920	SAMPLE	214574-010	Water	154716	09/09/09 23:01	1.0	6	
021	ji921	SAMPLE	214574-011	Water	154716	09/09/09 23:35	1.0	6	
022	ji922	SAMPLE	214574-001	Water	154716	09/10/09 00:09	4.0	6	
023	ji923	MSS	214574-002	Water	154716	09/10/09 00:43	14.29	6	
024	ji924	SAMPLE	214564-002	Water	154716	09/10/09 01:17	6.25	6	
025	ji925	MS	QC511345	Water	154716	09/10/09 01:51	14.29	6 7 8 9 10	
026	ji926	MSD	QC511346	Water	154716	09/10/09 02:25	14.29	6 7 8 9 10	
027	ji927	X	IB			09/10/09 02:59	1.0	6	
028	ji928	X	IB			09/10/09 03:33	1.0	6	
029	ji929	X	IB			09/10/09 04:07	1.0	6	
030	ji930	X	IB			09/10/09 04:42	1.0	6	
031	ji931	X	IB			09/10/09 05:16	1.0	6	

BO 09/09/09 : ji903, ji906, adjusted tune

HDD 09/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

HDD 09/10/09 : MSS over dilute,MS/MSD not used

LW 09/11/09 : Matrix spikes QC511345,QC511346 (batch 154716) were not reported because the parent sample was reanalyzed in another batch.

Analyst: HDD Date: 09/10/09 Reviewer: LW Date: 09/11/09

Standards used: 1=S12404 2=S12733 3=S12773 4=S12217 5=S12685 6=S12692 7=S12922 8=S12589 9=S12693 10=S12845

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499392292

Instrument : MSVOA10 Begun : 09/29/09 10:12
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jit01	X	IB			09/29/09 10:12	1.0	1	
002	jit02	TUN	BFB			09/29/09 11:11	1.0	2	
003	jit03	CCV/BS	QC514129	Water	155421	09/29/09 11:51	1.0	3 4 5 1	
004	jit04	BSD	QC514130	Water	155421	09/29/09 12:25	1.0	3 4 5 1	
005	jit05	X	IB			09/29/09 12:59	1.0	1	
006	jit06	BLANK	QC514128	Water	155421	09/29/09 13:34	1.0	1	
007	jit07	SAMPLE	215152-003	Water	155421	09/29/09 14:08	1.0	1	
008	jit08	SAMPLE	215063-001	Water	155421	09/29/09 14:42	1.0	1	
009	jit09	SAMPLE	215063-002	Water	155421	09/29/09 15:16	1.0	1	
010	jit10	SAMPLE	215063-003	Water	155421	09/29/09 15:51	1.0	1	
011	jit11	SAMPLE	215063-004	Water	155421	09/29/09 16:25	1.0	1	
012	jit12	SAMPLE	215063-005	Water	155421	09/29/09 16:58	1.0	1	
013	jit13	SAMPLE	215063-006	Water	155421	09/29/09 17:32	1.0	1	
014	jit14	SAMPLE	215063-007	Water	155421	09/29/09 18:06	1.0	1	
015	jit15	SAMPLE	215063-008	Water	155421	09/29/09 18:40	1.0	1	
016	jit16	SAMPLE	215065-005	Water	155421	09/29/09 19:14	1.0	1	
017	jit17	SAMPLE	215065-006	Water	155421	09/29/09 19:48	1.0	1	
018	jit18	SAMPLE	215065-008	Water	155421	09/29/09 20:22	1.0	1	1:TCE=110
019	jit19	SAMPLE	215065-009	Water	155421	09/29/09 20:56	1.0	1	
020	jit20	SAMPLE	215065-011	Water	155421	09/29/09 21:29	1.0	1	

DNT 09/29/09 : Worked up through jit07

DNT 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

DNT 09/29/09 : Matrix spikes were not performed for this analysis in batch 155421 due to insufficient sample amount.

LW 09/29/09 : Sequence reviewed through file jit07

MJD 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 20.

Analyst: MJD Date: 09/30/09 Reviewer: LW Date: 09/30/09

Standards used: 1=S13008 2=S12404 3=S12922 4=S12996 5=S12693

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499393725

Instrument : MSVOA10 Begun : 09/30/09 10:05
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jiu01	X	IB			09/30/09 10:05	1.0	1	
002	jiu02	X	BFB			09/30/09 10:43	1.0	2	
003	jiu03	TUN	BFB			09/30/09 11:08	1.0	2	
004	jiu04	CCV/BS	QC514373	Water	155479	09/30/09 11:33	1.0	3 4 5 1	
005	jiu05	BSD	QC514374	Water	155479	09/30/09 12:07	1.0	3 4 5 1	
006	jiu06	X	IB			09/30/09 12:41	1.0	1	
007	jiu07	BLANK	QC514372	Water	155479	09/30/09 13:15	1.0	1	
008	jiu08	SAMPLE	215170-001	Water	155479	09/30/09 13:49	1.0	1	
009	jiu09	SAMPLE	215065-007	Water	155479	09/30/09 14:23	2.0	1	
010	jiu10	SAMPLE	215065-010	Water	155479	09/30/09 14:57	2.0	1	
011	jiu11	SAMPLE	215065-008	Water	155479	09/30/09 15:31	3.333	1	
012	jiu12	SAMPLE	215170-002	Water	155479	09/30/09 16:05	1.0	1	
013	jiu13	SAMPLE	215072-002	Water	155479	09/30/09 16:38	1.0	1	
014	jiu14	MSS	215072-003	Water	155479	09/30/09 17:12	1.0	1	
015	jiu15	SAMPLE	215072-004	Water	155479	09/30/09 17:46	1.0	1	
016	jiu16	SAMPLE	215072-009	Water	155479	09/30/09 18:20	1.0	1	
017	jiu17	SAMPLE	215072-010	Water	155479	09/30/09 18:54	1.0	1	
018	jiu18	SAMPLE	215072-005	Water	155479	09/30/09 19:28	4.0	1	
019	jiu19	SAMPLE	215072-006	Water	155479	09/30/09 20:02	10.0	1	
020	jiu20	SAMPLE	215072-007	Water	155479	09/30/09 20:36	3.333	1	
021	jiu21	SAMPLE	215072-008	Water	155479	09/30/09 21:10	10.0	1	
022	jiu22	SAMPLE	215072-011	Water	155479	09/30/09 21:44	4.0	1	
023	jiu23	MS	QC514447	Water	155479	09/30/09 22:18	1.0	3 4 5 1	1:TCE=100
024	jiu24	MSD	QC514448	Water	155479	09/30/09 22:52	1.0	3 4 5 1	1:TCE=100
025	jiu25	X	IB			09/30/09 23:26	1.0	1	
026	jiu26	X	IB			10/01/09 00:00	1.0	1	
027	jiu27	X	IB			10/01/09 00:34	1.0	1	
028	jiu28	X	IB			10/01/09 01:08	1.0	1	
029	jiu29	X	IB			10/01/09 01:42	1.0	1	

MJD 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

TEW 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 29.

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S13008 2=S12404 3=S12922 4=S12996 5=S12693

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839390808

Instrument : MSVOA11 Begun : 09/28/09 09:28
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kis01	X	IB			09/28/09 09:28	1.0	1	
002	kis02	TUN	BFB			09/28/09 10:00	1.0	2	
003	kis03	X	20PPB			09/28/09 10:13	1.0	3 4 5 6 1	
004	kis04	X	QC513941	Water	155376	09/28/09 10:54	1.0	7 8 9 10 1	
005	kis05	X	IB			09/28/09 11:23	1.0	1	
006	kis06	CCV/LCS	QC513941	Water	155376	09/28/09 11:51	1.0	7 8 9 10 1	
007	kis07	X	IB			09/28/09 12:19	1.0	1	
008	kis08	BLANK	QC513940	Water	155376	09/28/09 12:48	1.0	1	
009	kis09	SAMPLE	215201-001	Water	155376	09/28/09 13:16	1.0	1	
010	kis10	SAMPLE	215201-003	Water	155376	09/28/09 13:44	1.0	1	1:MTBE=780
011	kis11	SAMPLE	215201-004	Water	155376	09/28/09 14:13	1.0	1	pH > 2
012	kis12	SAMPLE	215113-003	Water	155376	09/28/09 14:41	20.0	1	pH > 2
013	kis13	SAMPLE	215113-002	Water	155376	09/28/09 15:09	100.0	1	pH > 2
014	kis14	SAMPLE	215113-004	Water	155376	09/28/09 15:38	200.0	1	pH > 2
015	kis15	SAMPLE	215113-005	Water	155376	09/28/09 16:06	200.0	1	pH > 2
016	kis16	MSS	215113-006	Water	155376	09/28/09 16:34	100.0	1	pH > 2
017	kis17	SAMPLE	215113-007	Water	155376	09/28/09 17:02	20.0	1	pH > 2
018	kis18	SAMPLE	215113-008	Water	155376	09/28/09 17:31	20.0	1	pH > 2
019	kis19	SAMPLE	215113-009	Water	155376	09/28/09 17:59	20.0	1	pH > 2
020	kis20	SAMPLE	215113-010	Water	155376	09/28/09 18:27	20.0	1	pH > 2
021	kis21	SAMPLE	215113-011	Water	155376	09/28/09 18:56	1.0	1	
022	kis22	SAMPLE	215065-001	Water	155376	09/28/09 19:24	1.0	1	
023	kis23	SAMPLE	215065-002	Water	155376	09/28/09 19:52	1.0	1	
024	kis24	SAMPLE	215065-003	Water	155376	09/28/09 20:20	1.0	1	
025	kis25	SAMPLE	215065-004	Water	155376	09/28/09 20:49	1.0	1	
026	kis26	MS	QC513986	Water	155376	09/28/09 21:17	100.0	7 8 9 10 1	
027	kis27	MSD	QC513987	Water	155376	09/28/09 21:45	100.0	7 8 9 10 1	
028	kis28	X	IB			09/28/09 22:13	1.0	1	
029	kis29	X	IB			09/28/09 22:42	1.0	1	
030	kis30	X	IB			09/28/09 23:10	1.0	1	
031	kis31	X	IB			09/28/09 23:38	1.0	1	
032	kis32	X	IB			09/29/09 00:06	1.0	1	

DNT 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

Analyst: DNT Date: 09/29/09 Reviewer: LW Date: 09/29/09

Standards used: 1=S12947 2=S12404 3=S12998 4=S12773 5=S12565 6=S12929 7=S12996 8=S12845 9=S12693 10=S12924

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GC/MS VOLATILE ORGANICS

Batch #: 155376

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215201-1	B	<2				11	1x ; rush	9/28/09
2	3	↓	↓					↓ ↓	
3	4	↓	2.5						
4	215113-2	G	8			2		100x Foam ; at hold 9/28	
5	3	E	7			3		20X	
6	4	C	9			4		200X	
7	5	B	↓			6		200X	
8	6	↓	9			7		MSS, 100X	
9	6	↓	↓					MS/MSD, 100X	
10	7	C	7			8		20X	
11	8	↓	12			9		↓	
12	9	B	7			10			
13	10	C	4			11		↓	
14	11	A	<2					TB	
15	215065-1	↓	↓					TB	
16	2	↓	↓					1X	
17	3	↓	↓					↓	
18	4	↓	↓					↓	
19									
20									
21									
22									
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33									
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35									

GC/MS VOLATILE ORGANICS

Batch #: MJP 9/29/09 155421

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1									MJP 9/29/09
2	215065-5	B	<2				10	1X	
3	-6								
4	-7		<2			3		2X	rie 9/29/09
5	-8							1X	
6	-9								
7	-10		<2			4		2X	rie 9/29/09
8	-11							1X	MJP 9/29/09
9	215152-3	A	<2					TB	
10	215063-1							TB	
11	2							1X	
12	3								
13	4							1X	
14	5								
15	6								
16	7								
17	8								
18									
19									
20									
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32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155479

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
	told 9/30 215063-8	B						~~RR 1X ACE 1ev - w/ wt of 51 ppb~~	
2	215065-7	B	<2			3	10	RR 2x Sampler stopped	ne 9/29/09
3	-10					4		RR 2x	
4	-8	A	<2		X	6		RR 3.33x TCE >LR	9/30/09
5	215170-1							TB RUSH 10/1	MJD 9/30/09
6	-2	C						1X	
7	215072-2	A						1x HOLD 10/1	
8	3							MS1 1x	
9	3	BCD	<2					MS/MSD 1X	
10	4	A						1x	
11	5		<2			7		4x	
12	6					8		10 X	
13	7					9		3.33x	
14	8					10		10 X	
15	9							1x	
16	10								
17	11		<2			11		4x	
18									
19									
20									
21									
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35									

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 215071
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091809B	215071-001
BC-7A-9C1	215071-002
ASE-127A-9C1	215071-003
ASE-64A-9C1	215071-004
PL-531-9C1	215071-005
ASE-92A-9C1	215071-006
ASE-55A-9C1	215071-007
ASE-63A-9C1	215071-008
PL-533-9C1	215071-009
TB-091809A	215071-010
ASE-68A-9C1	215071-011
ASE-37A-9C1	215071-012
PL-532-9C1	215071-013

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/06/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215071**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/21/09**
Samples Received:	**09/19/09**

This data package contains sample and QC results for thirteen water samples, requested for the above referenced project on 09/21/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 09/09/09 02:42; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for acetone in the ICV analyzed 09/09/09 16:12; affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High response was observed for chloroethane in the CCV analyzed 09/30/09 20:13; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for a number of analytes in the CCV analyzed 10/01/09 08:41; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for a number of analytes in the CCV analyzed 10/01/09 09:23; these analytes met minimum response criteria, and affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for iodomethane and vinyl acetate in the CCV analyzed 10/01/09 16:14; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for chloroethane; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recovery was observed for naphthalene in the LCS for batch 155514.

Low recovery was observed for iodomethane in the MS of PL-532-9C1 (lab #

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215071**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/21/09**
Samples Received:	**09/19/09**

Volatile Organics by GC/MS (EPA 8260B):

215071-013); the LCS was within limits, and the associated RPD was within limits.

High recoveries were observed for carbon tetrachloride, 1,1-dichloropropene, and 2,2-dichloropropane in the BS for batch 155522; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample.

High recoveries were observed for carbon tetrachloride, 2,2-dichloropropane, and vinyl acetate in the MS/MSD for batch 155522; the parent sample was not a project sample, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample.

High recoveries were observed for many analytes in the LCS for batch 155523; these analytes were not detected at or above the RL in the associated sample.

Low recovery was observed for tert-butylbenzene in the MSD for batch 155523; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High recoveries were observed for many analytes in the MS/MSD for batch 155523; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample.

Low recovery was observed for iodomethane in the BS for batch 155528; the associated RPD was within limits.

Responses exceeding the instrument's linear range were observed for tetrachloroethene and trichloroethene in the MS/MSD for batch 155522.

No other analytical problems were encountered.

Chain of Custody

218071

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532
COC#	37380
Lab Proj # (SDG):	
Lab ID	CTBERK
Site ID	SKYHARBOR
Lab Job #	
Authorized User:	Honeywell

Text & Excel File Drive: Excel & Text File Drive

Copyright AESI: Version 6.0 Unauthorized use strictly prohibited.

Privileged & Confidential		Site Name:	Sky Harbor
		Location of Site:	Phoenix, AZ
Phase:		Sampling Program	Quarterly UST
Sampling Co.:	H+A	EDD To:	Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)		Sampler:	M. ~~Weiss~~ - D. Foehr - M. Hall
CH2M HILL		PO #	5101516
2625 South Plaza Drive, Suite 300		Analysis Turnaround Time (TAT):	14
Tempe, AZ 85282		Consultant	
Preliminary Data To	Jennifer Peterson, CH2M HILL		
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL		
Hard Copy To	Jennifer Peterson, CH2M HILL	Full Report TAT:	14
Invoice To:	Honeywell/Copy J Peterson		

Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
										Units																
1 TB BC-74	--	--	TB-091809B	9/18/9	0005	BLKWATER	WATER	TB	1	--	--	X														
2 BC-7A	--	74	BC-7A-9C1	9/18/9	0032	GW	WATER	Reg	4	G	N	X	X													
3 ASE-127A	--	90	ASE-127A-9C1	9/18/9	0108	GW	WATER	Reg	4	G	N	X	X													
4 ASE-64A	--	88	ASE-64A-9C1	9/18/9	0143	GW	WATER	Reg	4	G	N	X	X													
5 PL-531	--	--	PL-531-9C1	9/18/9	0153	GW	WATER	Reg	4	G	N	X	X													
6 ASE-92A	--	100	ASE-92A-9C1	9/18/9	0232	GW	WATER	Reg	4	G	N	X	X													
7 ASE-55A	--	78	ASE-55A-9C1	9/18/9	0314	GW	WATER	Reg	4	G	N	X	X													
8 ASE-63A	--	89	ASE-63A-9C1	9/18/9	0355	GW	WATER	Reg	4	G	N	X	X													
9 PL-533	--	--	PL-533-9C1	9/18/9	0408	BLKWATER	WATER	EB	4	G	N	X	X													
10																										
11																										
12																										

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact	Cooler Temp.
	H+A	09/18/09 17:00		Fed Ex	09/18/09 17:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact	Cooler Temp.
					9/21/9 10:00			

Preservatives: (Other; Specify):

Preservative: 0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

218071

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Privileged & Confidential

Site Name:	Sky Harbor	Phase:	
Location of Site:	Phoenix, AZ	Sampling Program	Quarterly UST

Sampling Co.:	H+A	EDD To:	Jennifer Peterson jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)		Sampler:	~~M. Weiee~~ - D. Foehr – J. Fenter
CH2M HILL		PO #	5101516
2625 South Plaza Drive, Suite 300		Analysis Turnaround Time (TAT):	14
Tempe, AZ 85282		Consultant	
Preliminary Data To	Jennifer Peterson, CH2M HILL		
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL		
Hard Copy To	Jennifer Peterson, CH2M HILL	Full Report TAT:	14
Invoice To:	Honeywell/Copy J Peterson		

Preservative

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	Chloride, Fluoride, Nitrate, Sulfate (E300.0)	ICP Metals (SW6010B/SW6020/SW7470A)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units																
10	1 ASE-68A	--	--	TB-091809A	9.18.09	0600	BLKWATR	WATR	TB	1			X														
11	2 ASE-68A	--	94	ASE-68A-9C1		0640	GW	WATR	Reg	4			X	X													
12	3 ASE-37A	--	110	ASE-37A-9C1		0853	GW	WATR	Reg	4(3)			X	X													
13	4 ASE-37A	--	--	PL-532-9C1		0905	BLKWATR	WATR	EB	4			X	X													
	5																										
	6																										
	7																										
	8																										
	9																										
	10																										
	11																										
	12																										

Relinquished by	Company	H+A	Received by	Company	Fed Ex	Condition		Custody Seals Intact	
	Date/Time	09/18/09 17:00		Date/Time	09/18/09 17:00	Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time	9/21/09 1100	Cooler Temp.			

Preservatives: (Other; Specify):

8 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 215071 Date Received 9/19/09 Number of coolers 1
Client CH2M Hill Project Sky Harbor

Date Opened 9/19/09 By (print) Ricky Grams (sign) [illegible]
Date Logged in 9/22/9 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info Harris & Assoc. Mike Weise 1640 S. Stapley Dr Mesa AZ Fedex

2A. Were custody seals present? ... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name ? Date 9/18/09
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS
1 Vial was broken SAMPLE # 012 was also broken.
DB's have bubbles.

Laboratory Job Number 215071

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/18/09
Units:	ug/L	Received:	09/19/09
Diln Fac:	1.000	Prepared:	09/25/09
Batch#:	155328		

Field ID:	BC-7A-9C1	Lab ID:	215071-002
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Field ID:	ASE-127A-9C1	Lab ID:	215071-003
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

Field ID:	ASE-64A-9C1	Lab ID:	215071-004
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,100 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

Field ID:	PL-531-9C1	Lab ID:	215071-005
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,300 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	112	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/18/09
Units:	ug/L	Received:	09/19/09
Diln Fac:	1.000	Prepared:	09/25/09
Batch#:	155328		

Field ID:	ASE-92A-9C1	Lab ID:	215071-006
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	3,300 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

Field ID:	ASE-55A-9C1	Lab ID:	215071-007
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	6,600 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	108	50-120	

Field ID:	ASE-63A-9C1	Lab ID:	215071-008
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,600 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Field ID:	PL-533-9C1	Lab ID:	215071-009
Type:	SAMPLE	Analyzed:	09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	95	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/18/09
Units:	ug/L	Received:	09/19/09
Diln Fac:	1.000	Prepared:	09/25/09
Batch#:	155328		

Field ID: ASE-68A-9C1 Lab ID: 215071-011
Type: SAMPLE Analyzed: 09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-37A-9C1 Lab ID: 215071-012
Type: SAMPLE Analyzed: 09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	92	50-120	

Field ID: PL-532-9C1 Lab ID: 215071-013
Type: SAMPLE Analyzed: 09/29/09

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

Type: BLANK Analyzed: 09/30/09
Lab ID: QC513729

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	114	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	155328
Units:	ug/L	Prepared:	09/25/09
Diln Fac:	1.000	Analyzed:	09/29/09

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC513730

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,127	85	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC513731

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,215	89	54-120	4	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

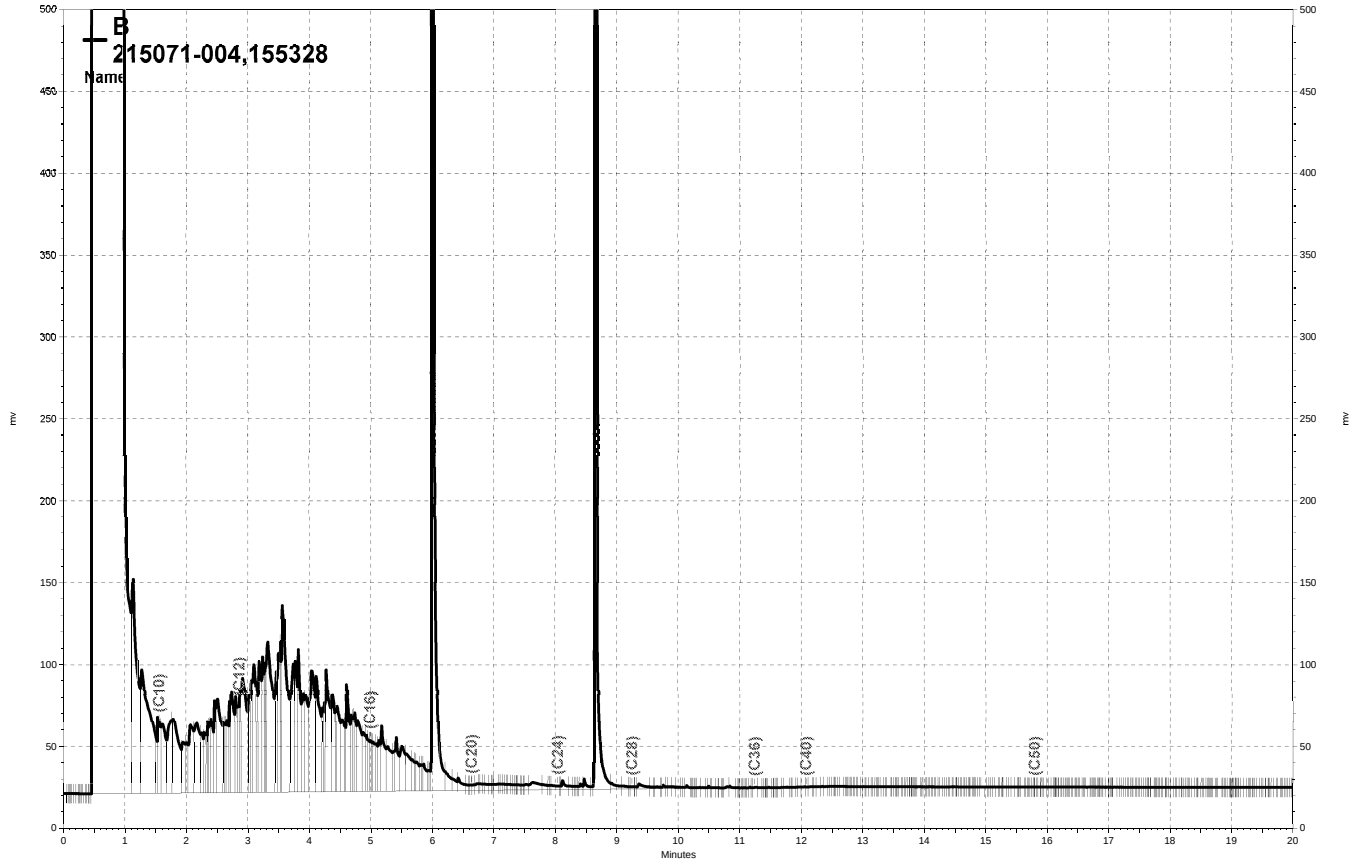
Total Extractable Hydrocarbons

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513732	Batch#:	155328
Matrix:	Water	Prepared:	09/25/09
Units:	ug/L	Analyzed:	09/29/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,615	105	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	



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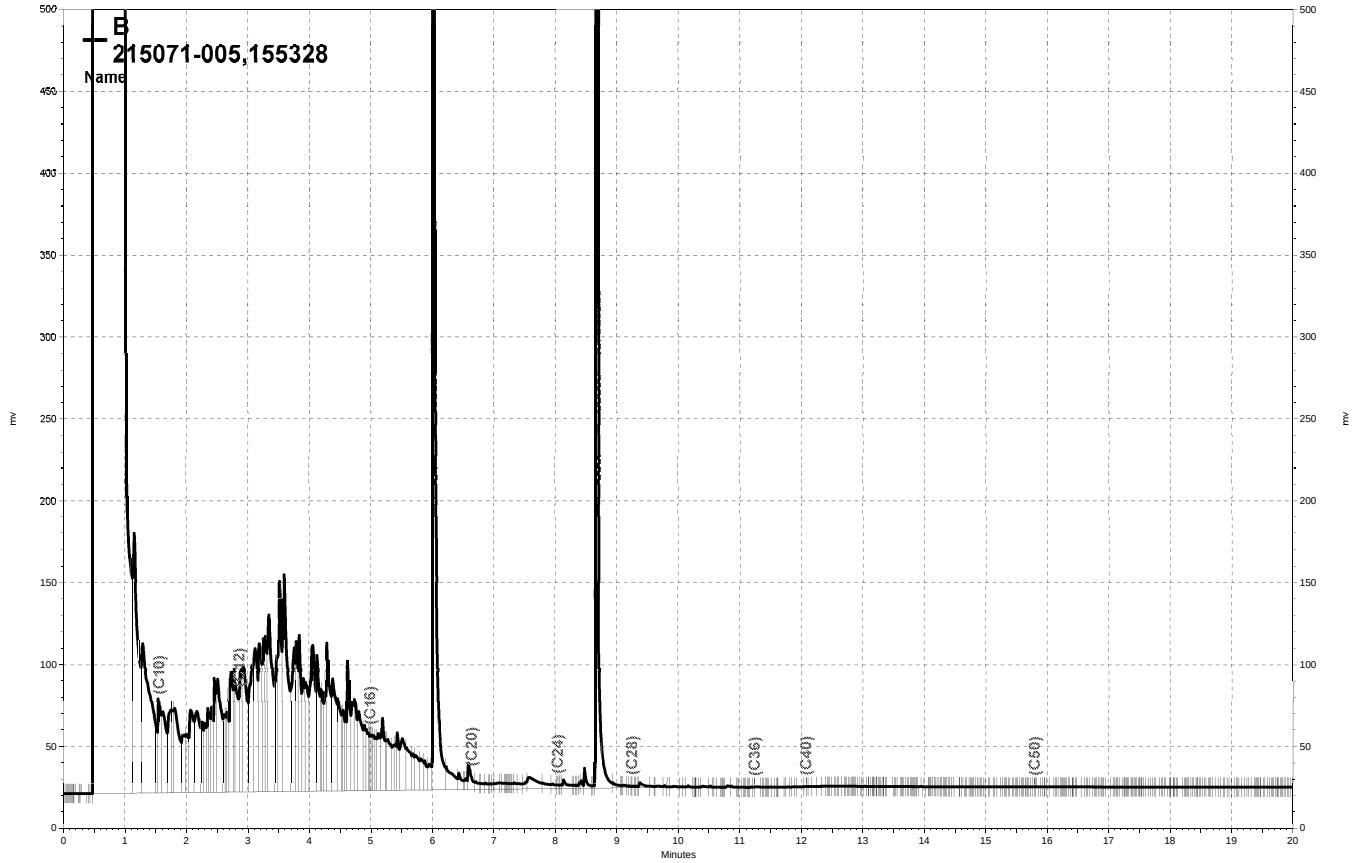

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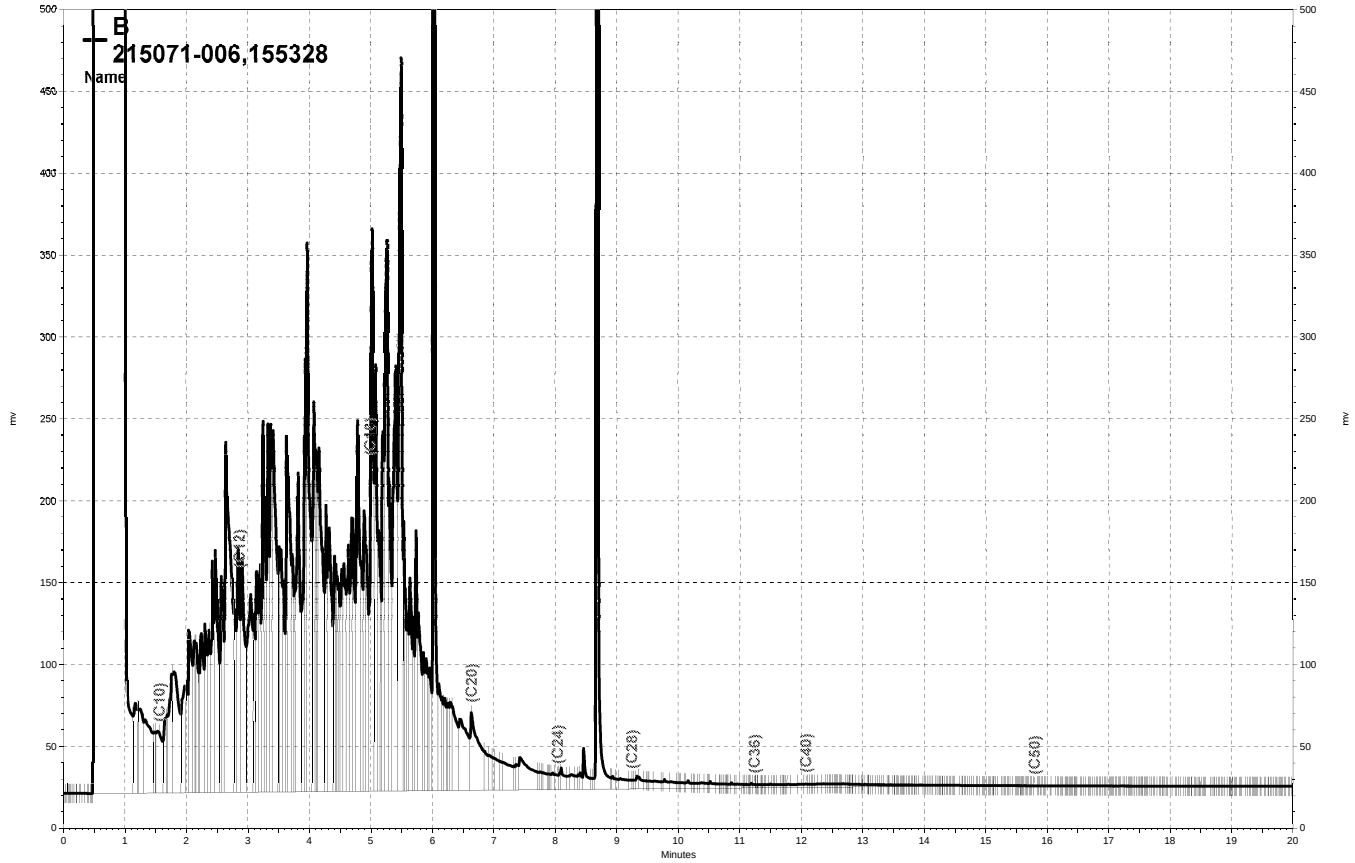

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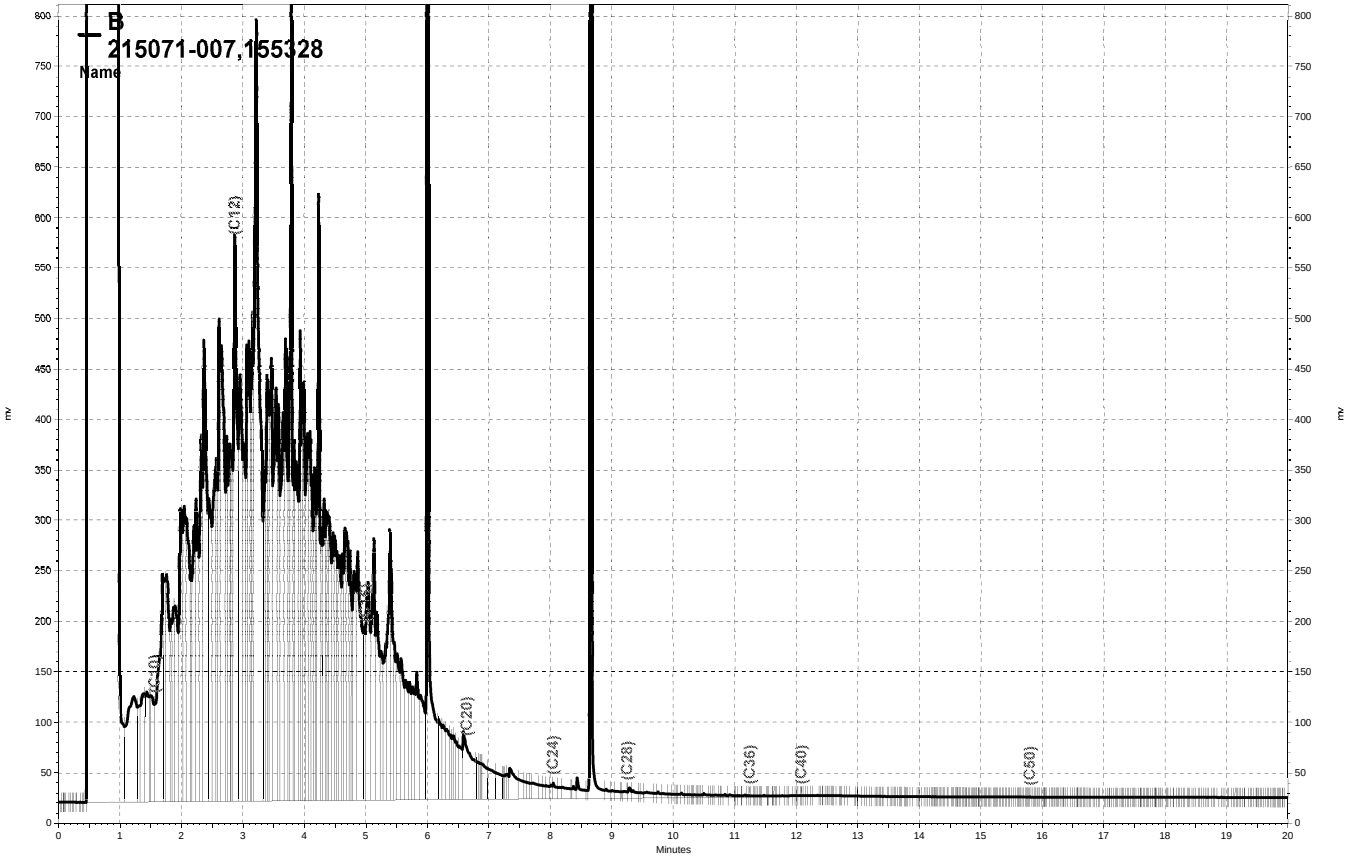

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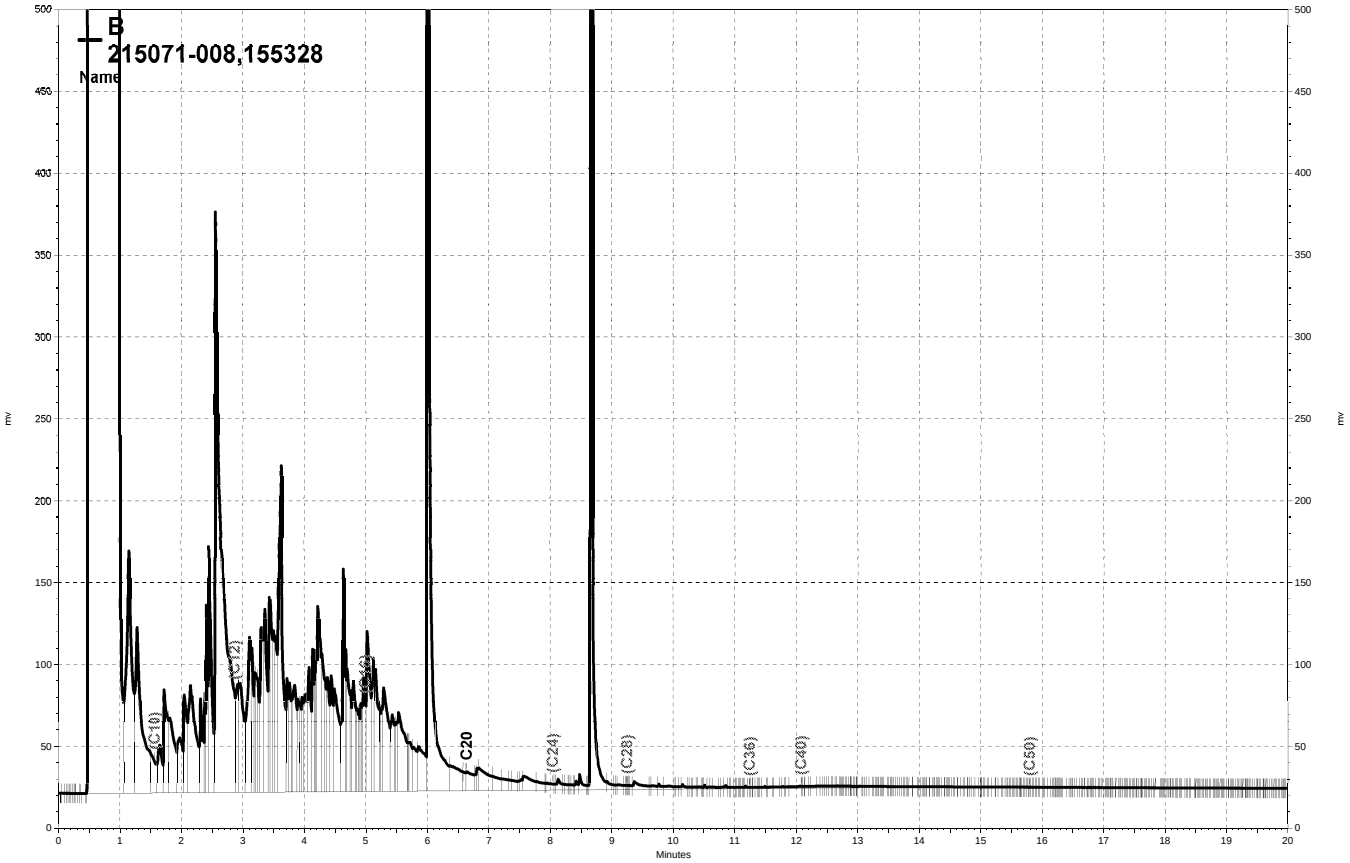

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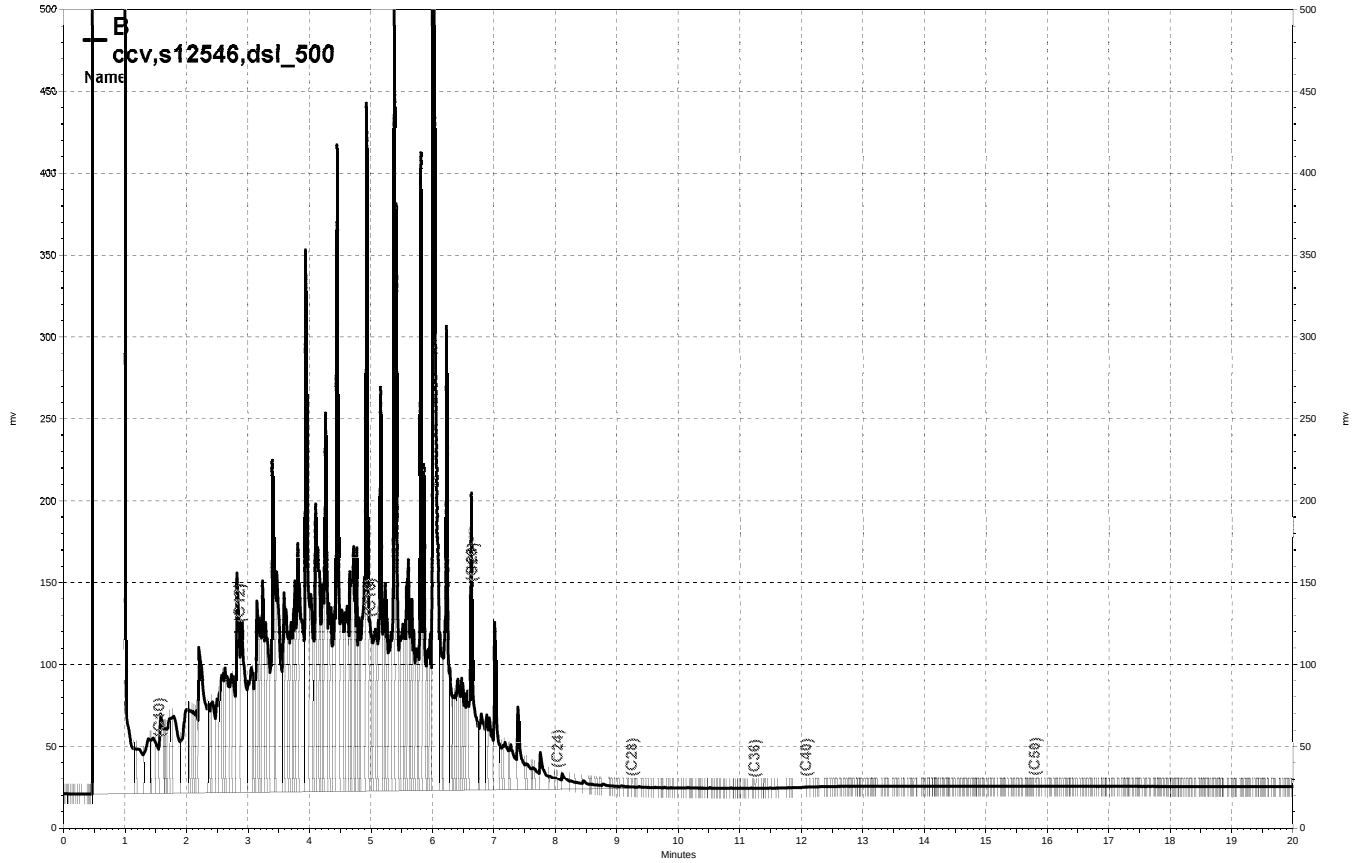

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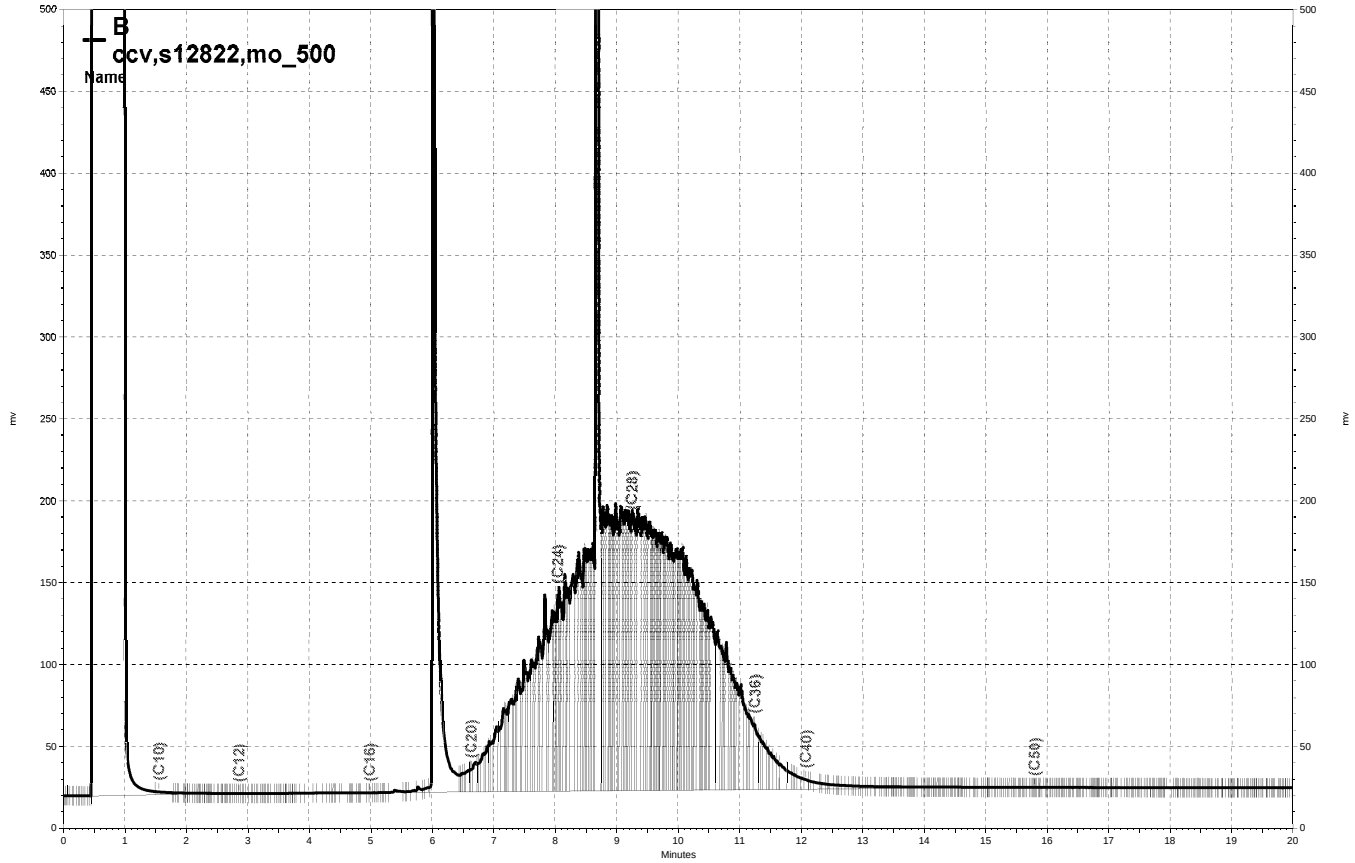

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CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507002
Units : mg/L

Name : DSL_225
Date : 13-AUG-2009 21:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_012	229324507012	DSL_10	13-AUG-2009 21:35	S11869
L2	225_013	229324507013	DSL_100	13-AUG-2009 22:03	S11870
L3	225_014	229324507014	DSL_500	13-AUG-2009 22:31	S11871
L4	225_015	229324507015	DSL_1000	13-AUG-2009 22:58	S11872
L5	225_016	229324507016	DSL_5000	13-AUG-2009 23:26	S11868
L6	225_017	229324507017	DSL_7500	13-AUG-2009 23:54	S11873

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	46507	41830	44857	42384	42411	43420	AVRG		2.30E-5		43568	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	7	100.0	-4	500.0	3	1000	-3	5000	-3	7500	0

TFB 08/15/09 : Levels 1-5, ICV, and IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 229324507002

Name : DSL_225
Cal Date : 13-AUG-2009

ICV 229324507019 (225_019 14-AUG-2009) stds: S12546

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	483.5	mg/L	-3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507003
Units : mg/L

Name : MO_225
Date : 14-AUG-2009 02:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_022	229324507022	MO_50	14-AUG-2009 02:16	S12675
L2	225_023	229324507023	MO_250	14-AUG-2009 02:45	S12676
L3	225_024	229324507024	MO_500	14-AUG-2009 03:14	S12677
L4	225_025	229324507025	MO_1000	14-AUG-2009 03:43	S12678
L5	225_026	229324507026	MO_5000	14-AUG-2009 04:11	S12679

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	33336	31193	30777	30135	28013	AVRG		3.26E-5		30691	6	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C22-C32	B	50.00	9	250.0	2	500.0	0	1000	-2	5000	-9

TFB 08/15/09 : Levels 1-3,5, and IB: corrected automatically drawn baseline.

TFB 08/15/09 : Level 6 was dropped due to high %RSD.

TFB 08/15/09 : This instrument will not be used to analyze MO ranges C28-C36 and C28-C40 due to out of range %D.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 229324507001
Units : mg/L

Name : HexOTP_225
Date : 14-AUG-2009 05:37
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	225_029	229324507029	HEX OTP_5	14-AUG-2009 05:37	S12539
L2	225_030	229324507030	HEX OTP_10	14-AUG-2009 06:06	S12540
L3	225_031	229324507031	HEX OTP_25	14-AUG-2009 06:34	S12541
L4	225_032	229324507032	HEX OTP_50	14-AUG-2009 07:03	S12542
L5	225_033	229324507033	HEX OTP_100	14-AUG-2009 07:31	S12543
L6	225_034	229324507034	HEX OTP_200	14-AUG-2009 08:00	S12544

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	50142	49537	49526	49425	50986	52699	AVRG		1.98E-5		50386	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	B	5.000	0	10.00	-2	25.00	-2	50.00	-2	100.0	1	200.0	5

TFB 08/15/09 : IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169127543005
Units : mg/L

Name : DSL 088
Date : 29-MAR-2009 16:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	088b006	169127543006	DSL_10	29-MAR-2009 16:04	S10988
L2	088b007	169127543007	DSL_100	29-MAR-2009 16:33	S10989
L3	088b008	169127543008	DSL_500	29-MAR-2009 17:01	S10990
L4	088b009	169127543009	DSL_1000	29-MAR-2009 17:30	S10991
L5	088b010	169127543010	DSL_5000	29-MAR-2009 17:58	S10987
L6	088b011	169127543011	DSL_7500	29-MAR-2009 18:26	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	42358	58755	64443	60339	58527	59730	AVRG		1.74E-5		57359	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-26	100.0	2	500.0	12	1000	5	5000	2	7500	4

DNT 04/01/09 : Level 1 was integrated for its fuel hump.

DNT 04/01/09 : Range c10-14's RSD is out high and will not be used.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 169127543005

Name : DSL 088
Cal Date : 29-MAR-2009

ICV 169127543013 (088b013 29-MAR-2009) stds: S11261

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	522.8	mg/L	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759001
Units : mg/L

Name : HEXOTP_217
Date : 05-AUG-2009 13:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b016	169312759016	HEXOTP_5	05-AUG-2009 13:19	S12539
L2	217b017	169312759017	HEXOTP_10	05-AUG-2009 13:47	S12540
L3	217b018	169312759018	HEXOTP_25	05-AUG-2009 14:15	S12541
L4	217b019	169312759019	HEXOTP_50	05-AUG-2009 14:43	S12542
L5	217b020	169312759020	HEXOTP_100	05-AUG-2009 15:11	S12543
L6	217b021	169312759021	HEXOTP_200	05-AUG-2009 15:39	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	72965	75709	72209	66588	71301	66484	AVRG		1.41E-5		70876	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	3	10.00	7	25.00	2	50.00	-6	100.0	1	200.0	-6

TFB 08/05/09 : Levels 1,5,6, and instrument blank: corrected automatically drawn baseline.

Analyst: TFB Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 169312759002
Units : mg/L

Name : MO_217
Date : 05-AUG-2009 16:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	217b023	169312759023	MO_50	05-AUG-2009 16:35	S11818
L2	217b024	169312759024	MO_250	05-AUG-2009 17:03	S11813
L3	217b025	169312759025	MO_500	05-AUG-2009 17:31	S11814
L4	217b026	169312759026	MO_1000	05-AUG-2009 17:59	S11815
L5	217b027	169312759027	MO_5000	05-AUG-2009 18:27	S11816
L6	217b028	169312759028	MO_7500	05-AUG-2009 18:55	S11817

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	46255	49685	45953	44086	37126	35084	AVRG		2.32E-5		43031	13	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	15	500.0	7	1000	2	5000	-14	7500	-18

DNT 08/06/09 : All levels were manually integrated for their fuel humps. The IB was also manually integrated for its baseline.

CP 08/06/09 : ICAL will not be used for C28-c40 and c28-c36.

Analyst: DNT Date: 08/06/09 Reviewer: EAH Date: 08/06/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179150420002
Units : mg/L

Name : DSL_104
Date : 14-APR-2009 20:09
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	104a020	179150420020	DSL_10	14-APR-2009 20:09	S10988
L2	104a021	179150420021	DSL_100	14-APR-2009 20:37	S10989
L3	104a022	179150420022	DSL_500	14-APR-2009 21:04	S10987 (10X)
L4	104a023	179150420023	DSL_1000	14-APR-2009 21:32	S10991
L5	104a024	179150420024	DSL_5000	14-APR-2009 22:00	S10987
L6	104a025	179150420025	DSL_7500	14-APR-2009 22:27	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	62853	72410	69018	70005	70165	71385	AVRG		1.44E-5		69306	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-9	100.0	4	500.0	0	1000	1	5000	1	7500	3

JDG 04/15/09 : DSL_100: integrated fuel hump.

Analyst: JDG Date: 04/15/09 Reviewer: ATL Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 179150420002

Name : DSL_104
Cal Date : 14-APR-2009

ICV 179150420027 (104a027 14-APR-2009) stds: S11498

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	474.5	mg/L	-5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179253466002
Units : mg/L

Name : OTPHEX_176
Date : 24-JUN-2009 21:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	176a003	179253466003	HEXOTP_5	24-JUN-2009 21:13	S11524
L2	176a004	179253466004	HEXOTP_10	24-JUN-2009 21:41	S11525
L3	176a005	179253466005	HEXOTP_25	24-JUN-2009 22:09	S11526
L4	176a006	179253466006	HEXOTP_50	24-JUN-2009 22:36	S11708
L5	176a007	179253466007	HEXOTP_100	24-JUN-2009 23:04	S11528

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	79786	93573	89882	73000	84521	AVRG		1.19E-5		84152	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	5.000	-5	10.00	11	25.00	7	50.00	-13	100.0	0

Analyst: JDG Date: 06/25/09 Reviewer: CW Date: 06/25/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179344632001
Units : mg/L

Name : Motor Oil_239
Date : 28-AUG-2009 20:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	239a023	179344632023	MO_50	28-AUG-2009 20:14	S12675
L2	239a024	179344632024	MO_250	28-AUG-2009 20:42	S12676
L3	239a025	179344632025	MO_500	28-AUG-2009 21:09	S12677
L4	239a026	179344632026	MO_1000	28-AUG-2009 21:36	S12678
L5	239a027	179344632027	MO_5000	28-AUG-2009 22:04	S12679
L6	239a028	179344632028	MO_7500	28-AUG-2009 22:31	S12680

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	54568	56522	48923	54207	54958	48382	AVRG		1.89E-5		52927	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	3	250.0	7	500.0	-8	1000	2	5000	4	7500	-9

TFB 08/31/09 : All levels & IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/31/09 Reviewer: CP Date: 08/31/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 229392156004 File : 272_004 Time : 29-SEP-2009 09:28
Standards: S12545

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	42034	250.0	241.2	mg/L	-4	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	48264	50.00	47.89	mg/L	-4	15	

JDG 09/29/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229392156005 File : 272_005 Time : 29-SEP-2009 09:59
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	28743	500.0	468.3	mg/L	-6	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	52398	50.00	52.00	mg/L	4	15	

JDG 09/29/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 229392156017 File : 272_017 Time : 29-SEP-2009 18:44
Standards: S12546

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	B	229324507002	13-AUG-2009	43568	41968	500.0	481.6	mg/L	-4	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	48414	50.00	48.04	mg/L	-4	15	

TFB 09/29/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: JDG Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 229392156018 File : 272_018 Time : 29-SEP-2009 19:15
Standards: S12822

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	B	229324507003	14-AUG-2009	30691	29152	500.0	474.9	mg/L	-5	15	
o-Terphenyl	B	229324507001	14-AUG-2009	50386	53006	50.00	52.60	mg/L	5	15	

TFB 09/29/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/29/09 Reviewer: JDG Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC15B Run Name : BUNK_500 IDF : 1.0
Seqnum : 169392155010 File : 272a010 Time : 29-SEP-2009 16:15
Cal : 169312759001 Caldate : 05-AUG-2009
Standards: S12582

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
o-Terphenyl	70876	69190	50.00	48.81	mg/L	-2	15	

TFB 09/29/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: EAH Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169392155011 File : 272a011 Time : 29-SEP-2009 16:42
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	47033	500.0	546.5	mg/L	9	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	74956	50.00	52.88	mg/L	6	15	

TFB 09/29/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 169392155012 File : 272a012 Time : 29-SEP-2009 17:10
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	61580	500.0	536.8	mg/L	7	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	68128	50.00	48.06	mg/L	-4	15	

TFB 09/29/09 : vial check confirms run 12 is dsl_500, s12546

TFB 09/29/09 [o-Terphenyl B]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 169392155025 File : 272a025 Time : 29-SEP-2009 23:10
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	169312759002	05-AUG-2009	43031	47835	500.0	555.8	mg/L	11	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	74602	50.00	52.63	mg/L	5	15	

JDG 09/30/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/30/09 Reviewer: TFB Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 169392155026 File : 272a026 Time : 29-SEP-2009 23:38
Standards: S12960

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	169127543005	29-MAR-2009	57359	61899	250.0	269.8	mg/L	8	15	
o-Terphenyl	169312759001	05-AUG-2009	70876	65104	50.00	45.93	mg/L	-8	15	

Analyst: JDG Date: 09/30/09 Reviewer: TFB Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 179392153011 File : 272a011 Time : 29-SEP-2009 14:46
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	179150420002	14-APR-2009	69306	68157	250.0	245.9	mg/L	-2	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	78802	50.00	46.82	mg/L	-6	15	

TFB 09/29/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: EAH Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179392153013 File : 272a013 Time : 29-SEP-2009 15:41
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	179344632001	28-AUG-2009	52927	51978	500.0	491.0	mg/L	-2	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	81868	50.00	48.64	mg/L	-3	15	

Analyst: JDG Date: 09/30/09 Reviewer: TFB Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 179392153026 File : 272a026 Time : 29-SEP-2009 21:44
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	179150420002	14-APR-2009	69306	65192	500.0	470.3	mg/L	-6	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	75480	50.00	44.85	mg/L	-10	15	

Analyst: JDG Date: 09/30/09 Reviewer: TFB Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179392153027 File : 272a027 Time : 29-SEP-2009 22:12
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	179344632001	28-AUG-2009	52927	56997	500.0	538.5	mg/L	8	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	89237	50.00	53.02	mg/L	6	15	

TFB 09/30/09 : Manually integrated fuel hump.

Analyst: JDG Date: 09/30/09 Reviewer: TFB Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869393835005 File : 273a005 Time : 30-SEP-2009 13:48
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	25406	1000	1051	mg/L	5	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28280	50.00	50.34	mg/L	1	15	

TFB 09/30/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/30/09 Reviewer: JDG Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869393835006 File : 273a006 Time : 30-SEP-2009 14:17
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	17980	500.0	496.3	mg/L	-1	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	28976	50.00	51.58	mg/L	3	15	

TFB 09/30/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/30/09 Reviewer: JDG Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
Seqnum : 869393835008 File : 273a008 Time : 30-SEP-2009 15:22
Standards: S12960

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	24766	250.0	256.1	mg/L	2	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	27631	50.00	49.19	mg/L	-2	15	

Analyst: TFB Date: 09/30/09 Reviewer: JDG Date: 09/30/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869393835009 File : 273a009 Time : 30-SEP-2009 15:50
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	18720	500.0	516.7	mg/L	3	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29707	50.00	52.88	mg/L	6	15	

TFB 09/30/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/30/09 Reviewer: JDG Date: 09/30/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	088b001	X	IB			03/29/09 13:43	1.0		
002	088b002	X	CMARKER			03/29/09 14:12	1.0	1	
003	088b003	X	IB			03/29/09 14:40	1.0		
004	088b004	X	IB			03/29/09 15:08	1.0		
005	088b005	IB	CALIB			03/29/09 15:36	1.0		
006	088b006	ICAL	DSL_10			03/29/09 16:04	1.0	2	
007	088b007	ICAL	DSL_100			03/29/09 16:33	1.0	3	
008	088b008	ICAL	DSL_500			03/29/09 17:01	1.0	4	
009	088b009	ICAL	DSL_1000			03/29/09 17:30	1.0	5	
010	088b010	ICAL	DSL_5000			03/29/09 17:58	1.0	6	
011	088b011	ICAL	DSL_7500			03/29/09 18:26	1.0	7	
012	088b012	IB	CALIB			03/29/09 18:54	1.0		
013	088b013	ICV	DSL_500			03/29/09 19:22	1.0	8	
014	088b014	X	ICV			03/29/09 19:50	1.0	8	
015	088b015	IB	CALIB			03/29/09 20:18	1.0		
016	088b016	ICAL	MO_50			03/29/09 20:47	1.0	9	
017	088b017	ICAL	MO_250			03/29/09 21:15	1.0	10	
018	088b018	ICAL	MO_500			03/29/09 21:43	1.0	11	
019	088b019	ICAL	MO_1000			03/29/09 22:11	1.0	12	
020	088b020	ICAL	MO_5000			03/29/09 22:39	1.0	13	
021	088b021	ICAL	MO_7500			03/29/09 23:07	1.0	14	
022	088b022	IB	CALIB			03/29/09 23:35	1.0		
023	088b023	ICAL	HEXOTP_5			03/30/09 00:03	1.0	15	
024	088b024	ICAL	HEXOTP_10			03/30/09 00:31	1.0	16	
025	088b025	ICAL	HEXOTP_25			03/30/09 00:59	1.0	17	
026	088b026	ICAL	HEXOTP_50			03/30/09 01:27	1.0	18	
027	088b027	ICAL	HEXOTP_100			03/30/09 01:55	1.0	19	
028	088b028	ICAL	HEXOTP_200			03/30/09 02:23	1.0	20	
029	088b029	IB	CALIB			03/30/09 02:51	1.0		
030	088b030	ICAL	JETA_10			03/30/09 03:19	1.0	21	
031	088b031	ICAL	JETA_100			03/30/09 03:47	1.0	22	
032	088b032	ICAL	JETA_500			03/30/09 04:15	1.0	23	
033	088b033	ICAL	JETA_1000			03/30/09 04:44	1.0	24	
034	088b034	ICAL	JETA_2000			03/30/09 05:12	1.0	25	
035	088b035	ICAL	JETA_3000			03/30/09 05:41	1.0	26	
036	088b036	IB	CALIB			03/30/09 06:09	1.0		
037	088b037	ICAL	JP5_10			03/30/09 06:38	1.0	27	
038	088b038	ICAL	JP5_100			03/30/09 07:06	1.0	28	
039	088b039	ICAL	JP5_500			03/30/09 07:34	1.0	29	
040	088b040	ICAL	JP5_1500			03/30/09 08:01	1.0	30	
041	088b041	ICAL	JP5_2500			03/30/09 08:29	1.0	31	
042	088b042	ICAL	JP5_5000			03/30/09 08:57	1.0	32	
043	088b043	IB	CALIB			03/30/09 09:25	1.0		
044	088b044	ICAL	BUNK_50			03/30/09 09:53	1.0	33	
045	088b045	ICAL	BUNK_500			03/30/09 10:21	1.0	34	
046	088b046	ICAL	BUNK_1250			03/30/09 10:49	1.0	35	
047	088b047	ICAL	BUNK_2500			03/30/09 11:17	1.0	36	
048	088b048	ICAL	BUNK_3000			03/30/09 11:45	1.0	37	
049	088b049	ICAL	BUNK_5000			03/30/09 12:13	1.0	38	
050	088b050	IB	CALIB			03/30/09 12:41	1.0		
051	088b051	CMARKER	C8-C50			03/30/09 13:08	1.0	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169127543

Instrument : GC15B Begun : 03/29/09 13:43
Method : EPA 8015B SOP Version : TEH_rv13

DNT 04/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: DNT Date: 04/01/09 Reviewer: ATL Date: 04/01/09

Standards used: 1=S11248 2=S10988 3=S10989 4=S10990 5=S10991 6=S10987 7=S10992 8=S11261 9=S10563 10=S10565 11=S10564 12=S10566 13=S10567 14=S10568 15=S11524 16=S11525 17=S11526 18=S11708 19=S11528 20=S11529 21=S10749 22=S10750 23=S10751 24=S10752 25=S10753 26=S10754 27=S10506 28=S10507 29=S10508 30=S10509 31=S10510 32=S10505 33=S10515 34=S10516 35=S10517 36=S10518 37=S10514 38=S11171

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	217b001	X	PRIMER			08/05/09 04:39	1.0		
002	217b002	X	IB			08/05/09 05:07	1.0		
003	217b003	X	CMARKER			08/05/09 05:35	1.0	1	
004	217b004	X	CCV			08/05/09 06:04	1.0	2	
005	217b005	CCV	MO_500			08/05/09 06:31	1.0	3	
006	217b006	CCV	DSL_1000			08/05/09 07:39	1.0	4	
007	217b007	X	CCV			08/05/09 08:07	1.0	3	
008	217b008	IB	CALIB			08/05/09 09:36	1.0		
009	217b009	ICAL	BUNK_50			08/05/09 10:04	1.0	5	
010	217b010	ICAL	BUNK_250			08/05/09 10:32	1.0	6	
011	217b011	ICAL	BUNK_500			08/05/09 11:00	1.0	6	
012	217b012	ICAL	BUNK_1250			08/05/09 11:28	1.0	7	
013	217b013	ICAL	BUNK_2500			08/05/09 11:55	1.0	8	
014	217b014	ICAL	BUNK_5000			08/05/09 12:23	1.0	9	
015	217b015	IB	CALIB			08/05/09 12:51	1.0		
016	217b016	ICAL	HEXOTP_5			08/05/09 13:19	1.0	10	
017	217b017	ICAL	HEXOTP_10			08/05/09 13:47	1.0	11	
018	217b018	ICAL	HEXOTP_25			08/05/09 14:15	1.0	12	
019	217b019	ICAL	HEXOTP_50			08/05/09 14:43	1.0	13	
020	217b020	ICAL	HEXOTP_100			08/05/09 15:11	1.0	14	
021	217b021	ICAL	HEXOTP_200			08/05/09 15:39	1.0	15	
022	217b022	IB	CALIB			08/05/09 16:07	1.0		
023	217b023	ICAL	MO_50			08/05/09 16:35	1.0	16	
024	217b024	ICAL	MO_250			08/05/09 17:03	1.0	17	
025	217b025	ICAL	MO_500			08/05/09 17:31	1.0	18	
026	217b026	ICAL	MO_1000			08/05/09 17:59	1.0	19	
027	217b027	ICAL	MO_5000			08/05/09 18:27	1.0	20	
028	217b028	ICAL	MO_7500			08/05/09 18:55	1.0	21	
029	217b029	IB	CALIB			08/05/09 19:23	1.0		
030	217b030	CMARKER	C8-C50			08/05/09 19:50	1.0	1	
031	217b031	CCV	DSL_250			08/05/09 21:18	1.0	22	
032	217b032	CCV	MO_500			08/05/09 21:46	1.0	3	
033	217b033	BLANK	QC489059	Soil	149293	08/05/09 22:18	1.0		
034	217b034	MDL	207488-001	Soil	149293	08/05/09 22:45	1.0		
035	217b035	X	207488-002	Soil	149293	08/05/09 23:13	1.0		
036	217b036	X	207488-003	Soil	149293	08/05/09 23:41	1.0		
037	217b037	MDL	207488-004	Soil	149293	08/06/09 00:09	1.0		
038	217b038	MDL	207488-005	Soil	149293	08/06/09 00:37	1.0		
039	217b039	MDL	207488-006	Soil	149293	08/06/09 01:05	1.0		
040	217b040	X	207488-007	Soil	149293	08/06/09 01:33	1.0		
041	217b041	X	207488-008	Soil	149293	08/06/09 02:02	1.0		
042	217b042	CCV	DSL_500			08/06/09 02:30	1.0	23	
043	217b043	CCV	MO_500			08/06/09 02:58	1.0	3	
044	217b044	X	CCV			08/06/09 03:26	1.0	23	
045	217b045	X	CCV			08/06/09 03:55	1.0	3	
046	217b046	CCV	DSL#2SPIKE			08/06/09 04:23	1.0	24	
047	217b047	MDL	207488-007	Soil	149293	08/06/09 11:38	1.0		
048	217b048	MDL	207488-008	Soil	149293	08/06/09 12:06	1.0		
049	217b049	MDL	207488-002	Soil	149293	08/06/09 12:57	1.0		
050	217b050	MDL	207488-003	Soil	149293	08/06/09 13:25	1.0		
051	217b051	CCV	MO_500			08/06/09 17:00	1.0	3	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169312759

Instrument : GC15B Begun : 08/05/09 04:39
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Standards used: 1=S11248 2=S12164 3=S12462 4=S12547 5=S12021 6=S12022 7=S12023 8=S12024 9=S12020 10=S12539 11=S12540 12=S12541 13=S12542 14=S12543 15=S12544 16=S11818 17=S11813 18=S11814 19=S11815 20=S11816 21=S11817 22=S12545 23=S12546 24=S12662

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 169392155

Instrument : GC15B Begun : 09/29/09 07:55
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	272a001	X	PRIMER				09/29/09 07:55	1.0	
002	272a002	X	IB				09/29/09 08:23	1.0	
003	272a003	X	CMARKER				09/29/09 12:42	1.0	1
004	272a004	CCV	MO_500				09/29/09 13:10	1.0	2
005	272a005	CCV	DSL_500				09/29/09 13:38	1.0	3
006	272a006	CCV	BUNK_500				09/29/09 14:06	1.0	4
007	272a007	SAMPLE	215191-008	S	Soil	155381	09/29/09 14:37	50.0	
008	272a008	SAMPLE	215191-009	S	Soil	155381	09/29/09 15:06	100.0	
009	272a009	SAMPLE	215195-005		Soil	155438	09/29/09 15:34	5.0	
010	272a010	CCV	BUNK_500				09/29/09 16:15	1.0	4
011	272a011	CCV	MO_500				09/29/09 16:42	1.0	2
012	272a012	CCV	DSL_500				09/29/09 17:10	1.0	3
013	272a013	SAMPLE	215036-008	S	Water	155328	09/29/09 17:38	1.0	
014	272a014	SAMPLE	215036-007	S	Water	155328	09/29/09 18:06	1.0	
015	272a015	SAMPLE	215036-009	S	Water	155328	09/29/09 18:34	1.0	
016	272a016	SAMPLE	215071-002		Water	155328	09/29/09 19:01	1.0	
017	272a017	SAMPLE	215071-003		Water	155328	09/29/09 19:29	1.0	
018	272a018	SAMPLE	215071-004		Water	155328	09/29/09 19:57	1.0	
019	272a019	X	IB				09/29/09 20:24	1.0	
020	272a020	SAMPLE	215071-005		Water	155328	09/29/09 20:52	1.0	
021	272a021	SAMPLE	215071-006		Water	155328	09/29/09 21:20	1.0	
022	272a022	SAMPLE	215071-007		Water	155328	09/29/09 21:47	1.0	
023	272a023	SAMPLE	215071-008		Water	155328	09/29/09 22:15	1.0	
024	272a024	X	CMARKER				09/29/09 22:42	1.0	1
025	272a025	CCV	MO_500				09/29/09 23:10	1.0	2
026	272a026	CCV	DSL_250				09/29/09 23:38	1.0	5
027	272a027	CCV	BUNK_500				09/30/09 00:07	1.0	4
028	272a028	X	CCV				09/30/09 00:35	1.0	2
029	272a029	X	CCV				09/30/09 01:03	1.0	5
030	272a030	X	CCV				09/30/09 01:31	1.0	4
031	272a031	BLANK	QC514196	S	Soil	155438	09/30/09 02:00	1.0	
032	272a032	SAMPLE	215236-001	S	Soil	155438	09/30/09 02:28	1.0	
033	272a033	SAMPLE	215236-002	S	Soil	155438	09/30/09 02:56	1.0	
034	272a034	SAMPLE	215236-003	S	Soil	155438	09/30/09 03:25	1.0	
035	272a035	SAMPLE	215236-004	S	Soil	155438	09/30/09 03:53	1.0	
036	272a036	SAMPLE	215236-005	S	Soil	155438	09/30/09 04:21	1.0	
037	272a037	SAMPLE	215236-006	S	Soil	155438	09/30/09 04:49	1.0	
038	272a038	SAMPLE	215162-001	S	Soil	155438	09/30/09 05:17	1.0	
039	272a039	LCS	QC514227	S	Soil	155438	09/30/09 05:45	1.0	
040	272a040	CCV	MO_500				09/30/09 06:13	1.0	2
041	272a041	CCV	DSL_1000				09/30/09 06:41	1.0	6
042	272a042	CCV	BUNK_500				09/30/09 07:09	1.0	4

SFL 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 10.

JDG 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 42.

Standards used: 1=S11248 2=S12822 3=S12546 4=S12582 5=S12960 6=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179150420

Instrument : GC17A Begun : 04/14/09 11:00
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	104a001	X	PRIMER			04/14/09 11:00	1.0		
002	104a002	IB	CALIB			04/14/09 11:27	1.0		
003	104a003	ICAL	HEXOTP_5			04/14/09 11:55	1.0	1	
004	104a004	ICAL	HEXOTP_10			04/14/09 12:22	1.0	2	
005	104a005	ICAL	HEXOTP_25			04/14/09 12:50	1.0	3	
006	104a006	ICAL	HEXOTP_50			04/14/09 13:17	1.0	4	
007	104a007	ICAL	HEXOTP_100			04/14/09 13:45	1.0	5	
008	104a008	ICAL	HEXOTP_200			04/14/09 14:12	1.0	6	
009	104a009	IB	CALIB			04/14/09 14:39	1.0		
010	104a010	X	IB			04/14/09 15:10	1.0		
011	104a011	X	CMARKER			04/14/09 15:38	1.0	7	
012	104a012	CCV	DSL_250			04/14/09 16:05	1.0	8	
013	104a013	CCV	MO_500			04/14/09 16:33	1.0	9	
014	104a014	CCV	HEXOTP_50			04/14/09 17:01	1.0	10	
015	104a015	CCV	MO_500			04/14/09 17:45	1.0	9	
016	104a016	X	IB			04/14/09 18:20	1.0		
017	104a017	X	IB			04/14/09 18:47	1.0		
018	104a018	X	IB			04/14/09 19:14	1.0		
019	104a019	IB	CALIB			04/14/09 19:42	1.0		
020	104a020	ICAL	DSL_10			04/14/09 20:09	1.0	11	
021	104a021	ICAL	DSL_100			04/14/09 20:37	1.0	12	
022	104a022	ICAL	DSL_500			04/14/09 21:04	1.0	13	
023	104a023	ICAL	DSL_1000			04/14/09 21:32	1.0	14	
024	104a024	ICAL	DSL_5000			04/14/09 22:00	1.0	13	
025	104a025	ICAL	DSL_7500			04/14/09 22:27	1.0	15	
026	104a026	IB	CALIB			04/14/09 22:55	1.0		
027	104a027	ICV	DSL_500			04/14/09 23:23	1.0	16	
028	104a028	X	ICV			04/14/09 23:50	1.0	16	
029	104a029	IB	CALIB			04/15/09 00:18	1.0		
030	104a030	ICAL	MO_50			04/15/09 00:45	1.0	17	
031	104a031	ICAL	MO_250			04/15/09 01:12	1.0	18	
032	104a032	ICAL	MO_500			04/15/09 01:40	1.0	19	
033	104a033	ICAL	MO_1000			04/15/09 02:07	1.0	20	
034	104a034	ICAL	MO_5000			04/15/09 02:34	1.0	21	
035	104a035	ICAL	MO_7500			04/15/09 03:02	1.0	22	
036	104a036	X	IB			04/15/09 03:29	1.0		
037	104a037	CMARKER	C8-C50			04/15/09 03:57	1.0	7	
038	104a038	X	IB			04/15/09 04:24	1.0		

DNT 04/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 04/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 38.

Analyst: DNT Date: 04/14/09 Reviewer: CP Date: 04/14/09

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11248 8=S11497 9=S11856 10=S11709 11=S10988 12=S10989 13=S10987 14=S10991 15=S10992 16=S11498 17=S11818 18=S11813 19=S11814 20=S11815 21=S11816 22=S11817

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179253466

Instrument : GC17A Begun : 06/24/09 20:19
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	176a001	X	PRIMER				06/24/09 20:19	1.0		
002	176a002	IB	CALIB				06/24/09 20:46	1.0		
003	176a003	ICAL	HEXOTP_5				06/24/09 21:13	1.0	1	
004	176a004	ICAL	HEXOTP_10				06/24/09 21:41	1.0	2	
005	176a005	ICAL	HEXOTP_25				06/24/09 22:09	1.0	3	
006	176a006	ICAL	HEXOTP_50				06/24/09 22:36	1.0	4	
007	176a007	ICAL	HEXOTP_100				06/24/09 23:04	1.0	5	
008	176a008	X	ICAL				06/24/09 23:31	1.0	6	
010	176a010	X	CMARKER				06/25/09 00:26	1.0	7	
011	176a011	X	IB				06/25/09 00:54	1.0		
012	176a012	X	IB				06/25/09 01:22	1.0		
013	176a013	CCV	DSL_250				06/25/09 01:49	1.0	8	
014	176a014	CCV	MO_500				06/25/09 02:17	1.0	9	
015	176a015	X	CCV				06/25/09 02:44	1.0	8	
016	176a016	X	CCV				06/25/09 03:12	1.0	9	
017	176a017	BLANK	QC501324	S	Soil	152313	06/25/09 03:39	1.0		
018	176a018	LCS	QC501325	S	Soil	152313	06/25/09 04:07	1.0		
019	176a019	BLANK	QC500990	S	Water	152234	06/25/09 04:35	1.0		
020	176a020	BS	QC500991	S	Water	152234	06/25/09 05:02	1.0		
021	176a021	BSD	QC500992	S	Water	152234	06/25/09 05:30	1.0		
022	176a022	PREPBLK	QC500993	S	WET DI Leachate	152234	06/25/09 05:57	1.0		
023	176a023	SAMPLE	212960-007	S	Soil	152313	06/25/09 06:25	1.0		
024	176a024	SAMPLE	212960-005	S	Soil	152313	06/25/09 06:52	1.0		
025	176a025	SAMPLE	212908-021	S	WET DI Leachate	152234	06/25/09 07:19	1.0		
026	176a026	SAMPLE	212908-019	S	Soil	152225	06/25/09 07:47	3.0		2:BUNKC:12-40=10000
027	176a027	X	DSL_500				06/25/09 08:15	1.0	10	
028	176a028	CCV	MO_500				06/25/09 08:42	1.0	9	
029	176a029	CCV	DSL_500				06/25/09 09:26	1.0	10	
030	176a030	X	IB				06/25/09 11:53	1.0		
031	176a031	CMARKER	C8-C50				06/25/09 12:20	1.0	7	
032	176a032	CCV	DSL_250				06/25/09 12:47	1.0	8	
033	176a033	CCV	MO_500				06/25/09 13:15	1.0	9	
034	176a034	BLANK	QC501461		Soil	152351	06/25/09 13:48	1.0		
035	176a035	LCS	QC501462		Soil	152351	06/25/09 14:16	1.0		
036	176a036	LCS	QC501512		Soil	152351	06/25/09 14:43	1.0		
037	176a037	CCV	DSL_500				06/25/09 15:25	1.0	10	
038	176a038	CCV	MO_500				06/25/09 15:52	1.0	9	
039	176a039	SAMPLE	213066-001	S	Soil	152313	06/25/09 16:36	10.0		
040	176a040	SAMPLE	213066-002	S	Soil	152313	06/25/09 17:03	10.0		
041	176a041	SAMPLE	213066-003	S	Soil	152313	06/25/09 17:31	10.0		
042	176a042	SAMPLE	213066-004	S	Soil	152313	06/25/09 17:58	10.0		
043	176a043	SAMPLE	213066-005	S	Soil	152313	06/25/09 18:25	5.0		
044	176a044	SAMPLE	213066-006	S	Soil	152313	06/25/09 18:52	5.0		
045	176a045	SAMPLE	213067-001	S	Soil	152313	06/25/09 19:20	10.0		
046	176a046	BLANK	QC501324	S	Soil	152313	06/25/09 19:47	1.0		
047	176a047	LCS	QC501325	S	Soil	152313	06/25/09 20:15	1.0		
048	176a048	BLANK	QC501324		Soil	152313	06/25/09 20:42	1.0		
049	176a049	X	CMARKER				06/25/09 21:10	1.0	7	
050	176a050	CCV	DSL_1000				06/25/09 21:37	1.0	11	
051	176a051	CCV	MO_500				06/25/09 22:05	1.0	9	
052	176a052	X	CCV				06/25/09 22:32	1.0	11	
053	176a053	X	CCV				06/25/09 22:59	1.0	9	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179253466

Instrument : GC17A Begun : 06/24/09 20:19
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
054	176a054	MSS	212960-003	S	Soil	152313	06/25/09 23:26	1.0		2:BUNKC:12-50=5200
055	176a055	MS	QC501326	S	Soil	152313	06/25/09 23:54	1.0		
056	176a056	MSD	QC501327	S	Soil	152313	06/26/09 00:21	1.0		
057	176a057	SAMPLE	212960-006	S	Soil	152313	06/26/09 00:49	5.0		
058	176a058	SAMPLE	212960-001	S	Soil	152313	06/26/09 01:16	1.0		
059	176a059	SAMPLE	212960-002	S	Soil	152313	06/26/09 01:44	1.0		
060	176a060	SAMPLE	212944-002	S	Soil	152264	06/26/09 02:11	10.0		
061	176a061	X	IB				06/26/09 02:39	1.0		
062	176a062	SAMPLE	212960-005	S	Soil	152313	06/26/09 03:07	1.0		
063	176a063	SAMPLE	212960-007	S	Soil	152313	06/26/09 03:34	1.0		
064	176a064	SAMPLE	212960-004	S	Soil	152313	06/26/09 04:02	1.0		
065	176a065	CCV	DSL_250				06/26/09 04:30	1.0	8	
066	176a066	CCV	MO_500				06/26/09 04:57	1.0	9	
067	176a067	X	CCV				06/26/09 05:25	1.0	8	
068	176a068	X	CCV				06/26/09 05:53	1.0	9	

JDG 06/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

JDG 06/26/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 68.

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11825 8=S12018 9=S12265 10=S12164 11=S12019

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179344632

Instrument : GC17A Begun : 08/27/09 07:52
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	239a001	X	IB			08/27/09 07:52	1.0		
002	239a002	X	CMARKER			08/27/09 08:20	1.0	1	
003	239a003	X	CCV			08/27/09 08:47	1.0	2	
004	239a004	X	CCV			08/27/09 09:14	1.0	3	
005	239a005	X	CMARKER			08/27/09 09:47	1.0	1	
006	239a006	X	IB			08/27/09 12:35	1.0		
007	239a007	X	CMARKER			08/27/09 13:02	1.0	1	
008	239a008	CCV	DSL_500			08/27/09 13:30	1.0	2	
009	239a009	CCV	MO_500			08/27/09 13:57	1.0	3	
010	239a010	CCV	DSL_500			08/27/09 14:47	1.0	2	
011	239a011	CCV	MO_500			08/27/09 15:15	1.0	3	
012	239a012	X	TANKCHECK			08/27/09 18:49	1.0		
013	239a013	X	TANKCHECK			08/27/09 19:16	1.0		
014	239a014	IB	CLEAN			08/27/09 19:44	1.0		
015	239a015	X	IB			08/28/09 14:09	1.0		
016	239a016	X	CMARKER			08/28/09 14:36	1.0	1	
017	239a017	CCV	DSL_500			08/28/09 15:04	1.0	2	
018	239a018	CCV	MO_500			08/28/09 15:31	1.0	3	
019	239a019	CCV	MO_500			08/28/09 16:11	1.0	3	
020	239a020	X	IB			08/28/09 18:51	1.0		
021	239a021	X	IB			08/28/09 19:19	1.0		
022	239a022	IB	CALIB			08/28/09 19:47	1.0		
023	239a023	ICAL	MO_50			08/28/09 20:14	1.0	4	
024	239a024	ICAL	MO_250			08/28/09 20:42	1.0	5	
025	239a025	ICAL	MO_500			08/28/09 21:09	1.0	6	
026	239a026	ICAL	MO_1000			08/28/09 21:36	1.0	7	
027	239a027	ICAL	MO_5000			08/28/09 22:04	1.0	8	
028	239a028	ICAL	MO_7500			08/28/09 22:31	1.0	9	
029	239a029	IB	CALIB			08/28/09 22:58	1.0		
030	239a030	CMARKER	C8C-50			08/28/09 23:26	1.0	1	
031	239a031	IB	CALIB			08/28/09 23:53	1.0		

DNT 08/31/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: DNT Date: 08/31/09 Reviewer: CP Date: 08/31/09

Standards used: 1=S11825 2=S12546 3=S12462 4=S12675 5=S12676 6=S12677 7=S12678 8=S12679 9=S12680

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179392153

Instrument : GC17A Begun : 09/29/09 07:53
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	272a001	X	PRIMER				09/29/09 07:53	1.0		
002	272a002	X	IB				09/29/09 08:21	1.0		
003	272a003	X	CMARKER				09/29/09 08:48	1.0	1	
004	272a004	CCV	DSL_500				09/29/09 09:16	1.0	2	
005	272a005	CCV	MO_500				09/29/09 09:43	1.0	3	
006	272a006	CCV	BUNK_500				09/29/09 10:11	1.0	4	
007	272a007	SAMPLE	215191-001	S	Soil	155381	09/29/09 12:54	20.0		
008	272a008	SAMPLE	215191-003	S	Soil	155381	09/29/09 13:21	25.0		
009	272a009	SAMPLE	215191-006	S	Soil	155381	09/29/09 13:49	50.0		
010	272a010	SAMPLE	215191-007	S	Soil	155381	09/29/09 14:16	50.0		
011	272a011	CCV	DSL_250				09/29/09 14:46	1.0	5	
012	272a012	CCV	BUNK_500				09/29/09 15:13	1.0	4	
013	272a013	CCV	MO_500				09/29/09 15:41	1.0	3	
014	272a014	X	QC513729		Water	155328	09/29/09 16:17	1.0		
015	272a015	BLANK	QC513729	S	Water	155328	09/29/09 16:44	1.0		
016	272a016	BS	QC513730	S	Water	155328	09/29/09 17:11	1.0		
017	272a017	BSD	QC513731	S	Water	155328	09/29/09 17:38	1.0		
018	272a018	LCS	QC513732	S	Water	155328	09/29/09 18:05	1.0		
019	272a019	SAMPLE	215036-001	S	Water	155328	09/29/09 18:32	1.0		
020	272a020	SAMPLE	215036-002	S	Water	155328	09/29/09 19:00	1.0		
021	272a021	SAMPLE	215036-003	S	Water	155328	09/29/09 19:27	1.0		
022	272a022	SAMPLE	215036-004	S	Water	155328	09/29/09 19:55	1.0		
023	272a023	SAMPLE	215036-005	S	Water	155328	09/29/09 20:22	1.0		
024	272a024	SAMPLE	215036-006	S	Water	155328	09/29/09 20:50	1.0		
025	272a025	X	CMARKER				09/29/09 21:17	1.0	1	
026	272a026	CCV	DSL_500				09/29/09 21:44	1.0	2	
027	272a027	CCV	MO_500				09/29/09 22:12	1.0	3	
028	272a028	X	CCV				09/29/09 22:39	1.0	2	
029	272a029	X	CCV				09/29/09 23:06	1.0	3	
030	272a030	LCS	QC514197	S	Soil	155438	09/29/09 23:34	1.0		
031	272a031	SAMPLE	215184-001		Soil	155438	09/30/09 00:01	1.0		
032	272a032	SAMPLE	215184-002		Soil	155438	09/30/09 00:29	1.0		
033	272a033	SAMPLE	215082-011	S	Soil	155438	09/30/09 00:56	10.0		
034	272a034	SAMPLE	215218-015	S	Soil	155438	09/30/09 01:24	10.0		
035	272a035	SAMPLE	215218-016	S	Soil	155438	09/30/09 01:51	20.0		
036	272a036	SAMPLE	215218-017	S	Soil	155438	09/30/09 02:19	2.0		
037	272a037	X	IB				09/30/09 02:47	1.0		
038	272a038	SAMPLE	215058-008	S	Water	155240	09/30/09 03:14	1.0		
039	272a039	CCV	DSL_500				09/30/09 03:42	1.0	2	
040	272a040	CCV	MO_500				09/30/09 04:10	1.0	3	
041	272a041	X	CCV				09/30/09 04:37	1.0	2	
042	272a042	X	CCV				09/30/09 05:05	1.0	3	

TFB 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDG 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 42.

Standards used: 1=S11825 2=S12546 3=S12822 4=S12582 5=S12545

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229324507

Instrument : GC14B Begun : 08/13/09 08:27
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	225_001	X	IB			08/13/09 08:27	1.0	
002	225_002	X	CMARKER			08/13/09 08:54	1.0	1
003	225_003	X	CCV			08/13/09 09:23	1.0	2
004	225_004	X	CCV			08/13/09 09:51	1.0	3
005	225_005	X	IB			08/13/09 17:46	1.0	
006	225_006	X	IB			08/13/09 17:55	1.0	
007	225_007	X	IB			08/13/09 18:44	1.0	
008	225_008	X	IB			08/13/09 20:01	1.0	
009	225_009	X	IB			08/13/09 20:09	1.0	
010	225_010	X	IB			08/13/09 20:39	1.0	
011	225_011	IB	CALIB			08/13/09 21:07	1.0	
012	225_012	ICAL	DSL_10			08/13/09 21:35	1.0	4
013	225_013	ICAL	DSL_100			08/13/09 22:03	1.0	5
014	225_014	ICAL	DSL_500			08/13/09 22:31	1.0	6
015	225_015	ICAL	DSL_1000			08/13/09 22:58	1.0	7
016	225_016	ICAL	DSL_5000			08/13/09 23:26	1.0	8
017	225_017	ICAL	DSL_7500			08/13/09 23:54	1.0	9
018	225_018	IB	CALIB			08/14/09 00:22	1.0	
019	225_019	ICV	DSL_500			08/14/09 00:51	1.0	2
020	225_020	X	ICV			08/14/09 01:19	1.0	2
021	225_021	IB	CALIB			08/14/09 01:48	1.0	
022	225_022	ICAL	MO_50			08/14/09 02:16	1.0	10
023	225_023	ICAL	MO_250			08/14/09 02:45	1.0	11
024	225_024	ICAL	MO_500			08/14/09 03:14	1.0	12
025	225_025	ICAL	MO_1000			08/14/09 03:43	1.0	13
026	225_026	ICAL	MO_5000			08/14/09 04:11	1.0	14
027	225_027	ICAL	MO_7500			08/14/09 04:40	1.0	15
028	225_028	IB	CALIB			08/14/09 05:09	1.0	
029	225_029	ICAL	HEX OTP_5			08/14/09 05:37	1.0	16
030	225_030	ICAL	HEX OTP_10			08/14/09 06:06	1.0	17
031	225_031	ICAL	HEX OTP_25			08/14/09 06:34	1.0	18
032	225_032	ICAL	HEX OTP_50			08/14/09 07:03	1.0	19
033	225_033	ICAL	HEX OTP_100			08/14/09 07:31	1.0	20
034	225_034	ICAL	HEX OTP_200			08/14/09 08:00	1.0	21
035	225_035	IB	CALIB			08/14/09 08:28	1.0	
036	225_036	ICAL	JP5_10			08/14/09 08:56	1.0	22
037	225_037	ICAL	JP5_100			08/14/09 09:24	1.0	23
038	225_038	ICAL	JP5_500			08/14/09 10:29	1.0	24
039	225_039	ICAL	JP5_1500			08/14/09 10:56	1.0	25
040	225_040	ICAL	JP5_2500			08/14/09 11:24	1.0	26
041	225_041	ICAL	JP5_5000			08/14/09 11:52	1.0	27
042	225_042	IB	CALIB			08/14/09 12:20	1.0	
043	225_043	ICAL	BUNK_50			08/14/09 12:48	1.0	28
044	225_044	ICAL	BUNK_250			08/14/09 13:16	1.0	29
045	225_045	X	BUNK_500			08/14/09 13:44	1.0	30
046	225_046	ICAL	BUNK_1250			08/14/09 14:12	1.0	31
047	225_047	ICAL	BUNK_2500			08/14/09 14:40	1.0	32
048	225_048	ICAL	BUNK_5000			08/14/09 15:08	1.0	33
049	225_049	IB	CALIB			08/14/09 15:36	1.0	
050	225_050	CMARKER	C8-C50			08/14/09 16:04	1.0	1
051	225_051	IB	CALIB			08/14/09 16:32	1.0	
052	225_052	ICAL	BUNK_500			08/15/09 12:20	1.0	30

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229324507

Instrument : GC14B Begun : 08/13/09 08:27
Method : EPA 8015B SOP Version : TEH_rv13

TFB 08/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 51.

Analyst: TFB Date: 08/15/09 Reviewer: EAH Date: 08/17/09

Standards used: 1=S11825 2=S12546 3=S12687 4=S11869 5=S11870 6=S11871 7=S11872 8=S11868 9=S11873 10=S12675 11=S12676 12=S12677 13=S12678 14=S12679 15=S12680 16=S12539 17=S12540 18=S12541 19=S12542 20=S12543 21=S12544 22=S11894 23=S11895 24=S11896 25=S11897 26=S11898 27=S11893 28=S12707 29=S12708 30=S12709 31=S12710 32=S12711 33=S12706

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 229392156

Instrument : GC14B Begun : 09/29/09 07:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	272_001	X	PRIMER				09/29/09 07:56	1.0		
002	272_002	X	IB				09/29/09 08:27	1.0		
003	272_003	X	CMARKER				09/29/09 08:58	1.0	1	
004	272_004	CCV	DSL_250				09/29/09 09:28	1.0	2	
005	272_005	CCV	MO_500				09/29/09 09:59	1.0	3	
006	272_006	SAMPLE	215058-008	S	Water	155240	09/29/09 13:01	1.0		
007	272_007	MS	QC513861		Soil	155357	09/29/09 13:31	1.0		1:BUNKC:12-40=12000
008	272_008	MSD	QC513862		Soil	155357	09/29/09 14:03	1.0		1:BUNKC:12-40=14000
009	272_009	X	IB				09/29/09 14:35	1.0		
010	272_010	SAMPLE	215058-008		Water	155240	09/29/09 15:07	1.0		
011	272_011	BLANK	QC514196		Soil	155438	09/29/09 15:38	1.0		
012	272_012	LCS	QC514197		Soil	155438	09/29/09 16:09	1.0		
013	272_013	SAMPLE	215071-013		Water	155328	09/29/09 16:40	1.0		
014	272_014	SAMPLE	215071-012		Water	155328	09/29/09 17:11	1.0		
015	272_015	SAMPLE	215071-011		Water	155328	09/29/09 17:42	1.0		
016	272_016	SAMPLE	215071-009		Water	155328	09/29/09 18:13	1.0		
017	272_017	CCV	DSL_500				09/29/09 18:44	1.0	4	
018	272_018	CCV	MO_500				09/29/09 19:15	1.0	3	
019	272_019	SAMPLE	215145-003	S	Water	155344	09/29/09 19:45	1.0		
020	272_020	SAMPLE	215054-002	S	Water	155344	09/29/09 20:16	1.0		
021	272_021	SAMPLE	215054-003	S	Water	155344	09/29/09 20:46	1.0		
022	272_022	SAMPLE	215055-001	S	Water	155344	09/29/09 21:17	1.0		
023	272_023	BLANK	QC514017		Water	155394	09/29/09 21:47	1.0		
024	272_024	SAMPLE	215146-002		Water	155394	09/29/09 22:18	1.0		
025	272_025	SAMPLE	215153-001		Water	155394	09/29/09 22:49	1.0		
026	272_026	SAMPLE	215170-002		Water	155394	09/29/09 23:21	1.0		
027	272_027	MSS	215143-001	S	Water	155394	09/29/09 23:52	1.0		
028	272_028	SAMPLE	215145-006	S	Water	155394	09/30/09 00:24	1.0		
029	272_029	X	CMARKER				09/30/09 00:56	1.0	1	
030	272_030	CCV	DSL_1000				09/30/09 01:27	1.0	5	
031	272_031	X	MO_500				09/30/09 01:59	1.0	3	
032	272_032	X	CCV				09/30/09 02:31	1.0	5	
033	272_033	CCV	MO_500				09/30/09 03:03	1.0	3	
034	272_034	BLANK	QC514017	S	Water	155394	09/30/09 03:34	1.0		
035	272_035	LCS	QC514018	S	Water	155394	09/30/09 04:06	1.0		
036	272_036	MS	QC514019	S	Water	155394	09/30/09 04:37	1.0		
037	272_037	MSD	QC514020	S	Water	155394	09/30/09 05:08	1.0		
038	272_038	SAMPLE	215172-002		Miscell.	155438	09/30/09 05:39	20.0		
039	272_039	X	IB				09/30/09 06:10	1.0		
040	272_040	SAMPLE	215198-001		Soil	155438	09/30/09 06:40	1.0		
041	272_041	SAMPLE	215198-002		Soil	155438	09/30/09 07:11	1.0		
042	272_042	CCV	DSL_250				09/30/09 07:41	1.0	2	
043	272_043	CCV	MO_500				09/30/09 08:12	1.0	3	

SFL 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

JDG 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 43.

Standards used: 1=S11825 2=S12545 3=S12822 4=S12546 5=S12547

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813 12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895 23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869393835

Instrument : GC26A Begun : 09/30/09 11:55
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	273a001	X	PRIMER				09/30/09 11:55	1.0		
002	273a002	X	IB				09/30/09 12:23	1.0		
003	273a003	X	IB				09/30/09 12:52	1.0		
004	273a004	X	CMARKER				09/30/09 13:20	1.0	1	
005	273a005	CCV	DSL_1000				09/30/09 13:48	1.0	2	
006	273a006	CCV	MO_500				09/30/09 14:17	1.0	3	
007	273a007	BLANK	QC513729		Water	155328	09/30/09 14:48	1.0		
008	273a008	CCV	DSL_250				09/30/09 15:22	1.0	4	
009	273a009	CCV	MO_500				09/30/09 15:50	1.0	3	
010	273a010	X	CCV				09/30/09 17:10	1.0	5	
011	273a011	CCV	JP5_250				09/30/09 17:44	1.0	6	
012	273a012	BLANK	QC514232	S	Water	155447	09/30/09 18:12	1.0		
013	273a013	LCS	QC514233	S	Water	155447	09/30/09 18:40	1.0		
014	273a014	MS	QC514234	S	Water	155447	09/30/09 19:09	1.0		
015	273a015	MSD	QC514235	S	Water	155447	09/30/09 19:37	1.0		
016	273a016	SAMPLE	215117-001	S	Water	155447	09/30/09 20:06	1.0		
017	273a017	SAMPLE	215117-002	S	Water	155447	09/30/09 20:35	1.0		
018	273a018	SAMPLE	215117-003	S	Water	155447	09/30/09 21:03	1.0		
019	273a019	SAMPLE	215117-004	S	Water	155447	09/30/09 21:32	1.0		
020	273a020	SAMPLE	215117-005	S	Water	155447	09/30/09 22:01	1.0		
021	273a021	SAMPLE	215117-006	S	Water	155447	09/30/09 22:29	1.0		
022	273a022	X	CMARKER				09/30/09 22:58	1.0	1	
023	273a023	CCV	DSL_500				09/30/09 23:27	1.0	7	
024	273a024	CCV	MO_500				09/30/09 23:55	1.0	3	
025	273a025	CCV	JP5_250				10/01/09 00:24	1.0	6	
026	273a026	X	CCV				10/01/09 00:52	1.0	7	
027	273a027	X	CCV				10/01/09 01:21	1.0	3	
028	273a028	X	CCV				10/01/09 01:50	1.0	6	
029	273a029	SAMPLE	215221-003	S	Water	155447	10/01/09 02:19	1.0		2:BUNKC:12-40=7300
030	273a030	SAMPLE	215221-005	S	Water	155447	10/01/09 02:47	1.0		7:BUNKC:12-40=21000
031	273a031	SAMPLE	215117-007	S	Water	155447	10/01/09 03:16	1.0		
032	273a032	PREPBLK	QC514236	S	WET DI Leachate	155447	10/01/09 03:45	1.0		
033	273a033	CCV	DSL_1000				10/01/09 04:13	1.0	2	
034	273a034	CCV	MO_500				10/01/09 04:42	1.0	3	
035	273a035	CCV	JP5_250				10/01/09 05:10	1.0	6	

TFB 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 35.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12960 5=S12273 6=S12969 7=S12546

SAMPLE PREPARATION SUMMARY

Batch # : 155328 Analysis : TEH
Started By : SFL Prep Date : 25-SEP-2009 14:20 Finished By : KKM
Method : 3520C SOP Version : TEH_3520_rv12 Units : mL
Spike #1 ID : S12934 Spike #2 ID : S12972 Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215036-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215036-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215071-002		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-003		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-004		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-005		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-006		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-007		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-008		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-009		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-011		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-012		Water	500	2.5	1	0.005	7	.5				TEHM	
215071-013		Water	500	2.5	1	0.005	7	.5				TEHM	
QC513729	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC513730	BS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC513731	BSD	Water	500	2.5	1	0.005		.5	.5		3630C		
QC513732	LCS	Water	500	2.5	1	0.005		.5		.5			

TFB 09/29/09 : Matrix spikes were not performed for this analysis in batch 155328 due to insufficient sample amount.

Analyst: TFB Date: 09/30/09 Reviewer: JDG Date: 09/30/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 155328
LIMS Analysis: TEH
Date Extracted: 9/25/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☑ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
215036-001	J	500	7	2.5	X	
2	L					
3	G					
4	J					
5						
6						
7						
8						
9						
215071-002	D					
3						
4						
5						
6						
7						
8						
9						
11						
12	C					
13	D					
MB QC 513729					X	
BS 30						
BSD 31						
LCS 32						MO ✗

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129340	SF 9/25/09
*0.5 / 0.5 mL of TEH_SP was added to all spikes	S129720 / 513900	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FSO 9334 / 333 / 9/25/09	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM4 9/18	
Extraction Start Time:	1630	KKM 9/25/09
Extraction End Time:	1251	KKM 09/26/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	KKM 9/26/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM49 0079 09	
Concentrated to final volume at temperature (degrees C)	100	
Relinquished to TEH Department	✓	

9/25/09
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

TFB 9/29/09
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KKM
Cleanup Date: 9/29/09

Benchbook # **BK 2939**
Page 28

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
215036-001	155328	1.0	1.0	
002				
003				
004				
005				
006				
007				
008				
009				
MB GC513729				
BS 30				
BSD 31				
215054-002	155344	1.0		
003				
215055-001				
215083-001				
002				
003				
004				
005				
006				
KKM 9/29 007				
215128 001				
002				
003 KKM 9/29				
215145 003				
MB GC513 ~~005~~ E01				
BS ~~006~~ E02				
BSD KKM 9/29 E03				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	KKM 9/29/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11910	
Extracts were eluted with 4.0 mL CH_2Cl_2	5MB49205	
Concentrated to volumes as noted above	✓	✓

KKM 9/29/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

TFB 9/29/09
Reviewed by / Date

Laboratory Job Number 215071

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091809B	Batch#:	155514
Lab ID:	215071-001	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091809B	Batch#:	155514
Lab ID:	215071-001	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-7A-9C1	Batch#:	155514
Lab ID:	215071-002	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	0.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-7A-9C1	Batch#:	155514
Lab ID:	215071-002	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	106	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-127A-9C1	Batch#:	155514
Lab ID:	215071-003	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	0.5	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-127A-9C1	Batch#:	155514
Lab ID:	215071-003	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-64A-9C1	Batch#:	155514
Lab ID:	215071-004	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	4.5	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-64A-9C1	Batch#:	155514
Lab ID:	215071-004	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	37	0.5	
m,p-Xylenes	94	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	54	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	30	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	9.5	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	1.1	0.5	
1,2,4-Trimethylbenzene	24	0.5	
sec-Butylbenzene	5.7	0.5	
para-Isopropyl Toluene	1.6	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	3.7	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	35	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	94	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	106	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-531-9C1	Batch#:	155514
Lab ID:	215071-005	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	4.5	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-531-9C1	Batch#:	155514
Lab ID:	215071-005	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	37	0.5	
m,p-Xylenes	94	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	54	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	30	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	9.6	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	1.1	0.5	
1,2,4-Trimethylbenzene	24	0.5	
sec-Butylbenzene	5.6	0.5	
para-Isopropyl Toluene	1.6	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	3.7	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	32	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	94	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	105	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-92A-9C1	Batch#:	155514
Lab ID:	215071-006	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	4.0	D2
Chloromethane	ND	4.0	D2
Vinyl Chloride	ND	2.0	D2
Bromomethane	ND	4.0	D2
Chloroethane	ND	4.0	D2 V1
Trichlorofluoromethane	ND	4.0	D2
Iodomethane	ND	40	D2
Acetone	ND	40	D2
1,1-Dichloroethene	ND	2.0	D2
Methylene Chloride	ND	40	D2
Carbon Disulfide	ND	2.0	D2
MTBE	210	2.0	D2
trans-1,2-Dichloroethene	ND	2.0	D2
Vinyl Acetate	ND	40	D2
1,1-Dichloroethane	ND	2.0	D2
2-Butanone	ND	40	D2
cis-1,2-Dichloroethene	ND	2.0	D2
2,2-Dichloropropane	ND	2.0	D2
Chloroform	ND	2.0	D2
Bromochloromethane	ND	2.0	D2
1,1,1-Trichloroethane	ND	2.0	D2
1,1-Dichloropropene	ND	2.0	D2
Carbon Tetrachloride	ND	2.0	D2
1,2-Dichloroethane	ND	2.0	D2
Benzene	120	2.0	D2
Trichloroethene	ND	2.0	D2
1,2-Dichloropropane	ND	2.0	D2
Bromodichloromethane	ND	2.0	D2
Dibromomethane	ND	2.0	D2
4-Methyl-2-Pentanone	ND	40	D2
cis-1,3-Dichloropropene	ND	2.0	D2
Toluene	ND	2.0	D2
trans-1,3-Dichloropropene	ND	2.0	D2
1,1,2-Trichloroethane	ND	2.0	D2
2-Hexanone	ND	40	D2
1,3-Dichloropropane	ND	2.0	D2
Tetrachloroethene	ND	2.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-92A-9C1	Batch#:	155514
Lab ID:	215071-006	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	2.0	D2
1,2-Dibromoethane	ND	2.0	D2
Chlorobenzene	ND	2.0	D2
1,1,1,2-Tetrachloroethane	ND	2.0	D2
Ethylbenzene	ND	2.0	D2
m,p-Xylenes	ND	2.0	D2
o-Xylene	ND	2.0	D2
Styrene	ND	2.0	D2
Bromoform	ND	4.0	D2
Isopropylbenzene	8.8	2.0	D2
1,1,2,2-Tetrachloroethane	ND	2.0	D2
1,2,3-Trichloropropane	ND	2.0	D2
Propylbenzene	6.9	2.0	D2
Bromobenzene	ND	2.0	D2
1,3,5-Trimethylbenzene	ND	2.0	D2
2-Chlorotoluene	ND	2.0	D2
4-Chlorotoluene	ND	2.0	D2
tert-Butylbenzene	ND	2.0	D2
1,2,4-Trimethylbenzene	ND	2.0	D2
sec-Butylbenzene	2.6	2.0	D2
para-Isopropyl Toluene	ND	2.0	D2
1,3-Dichlorobenzene	ND	2.0	D2
1,4-Dichlorobenzene	ND	2.0	D2
n-Butylbenzene	ND	2.0	D2
1,2-Dichlorobenzene	ND	2.0	D2
1,2-Dibromo-3-Chloropropane	ND	8.0	D2
1,2,4-Trichlorobenzene	ND	2.0	D2
Hexachlorobutadiene	ND	8.0	D2
Naphthalene	70	8.0	D2 L1
1,2,3-Trichlorobenzene	ND	2.0	D2
Xylene (total)	ND	2.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-55A-9C1	Diln Fac:	1.000
Lab ID:	215071-007	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09

Analyte	Result	RL	Batch#	ADEQ Flags
Freon 12	ND	1.0	155522	V1
Chloromethane	ND	1.0	155522	
Vinyl Chloride	1.6	0.5	155522	
Bromomethane	ND	1.0	155522	
Chloroethane	2.3	1.0	155522	
Trichlorofluoromethane	ND	1.0	155522	
Iodomethane	ND	10	155522	
Acetone	ND	10	155514	
1,1-Dichloroethene	ND	0.5	155522	
Methylene Chloride	ND	10	155522	
Carbon Disulfide	ND	0.5	155522	
MTBE	33	0.5	155522	
trans-1,2-Dichloroethene	ND	0.5	155522	
Vinyl Acetate	ND	10	155522	R2
1,1-Dichloroethane	15	0.5	155522	
2-Butanone	ND	10	155522	
cis-1,2-Dichloroethene	ND	0.5	155522	
2,2-Dichloropropane	ND	0.5	155522	L1 V1
Chloroform	ND	0.5	155522	
Bromochloromethane	ND	0.5	155522	
1,1,1-Trichloroethane	ND	0.5	155522	
1,1-Dichloropropene	ND	0.5	155522	L1 V1
Carbon Tetrachloride	ND	0.5	155522	L1 V1
1,2-Dichloroethane	ND	0.5	155522	
Benzene	10	0.5	155522	
Trichloroethene	ND	0.5	155522	
1,2-Dichloropropane	ND	0.5	155522	
Bromodichloromethane	ND	0.5	155522	
Dibromomethane	ND	0.5	155522	
4-Methyl-2-Pentanone	ND	10	155522	
cis-1,3-Dichloropropene	ND	0.5	155522	
Toluene	ND	0.5	155522	
trans-1,3-Dichloropropene	ND	0.5	155522	
1,1,2-Trichloroethane	ND	0.5	155522	
2-Hexanone	ND	10	155522	
1,3-Dichloropropane	ND	0.5	155522	
Tetrachloroethene	ND	0.5	155522	
Dibromochloromethane	ND	0.5	155522	
1,2-Dibromoethane	ND	0.5	155522	
Chlorobenzene	ND	0.5	155522	
1,1,1,2-Tetrachloroethane	ND	0.5	155522	
Ethylbenzene	1.7	0.5	155522	
m,p-Xylenes	2.4	0.5	155522	
o-Xylene	ND	0.5	155522	
Styrene	ND	0.5	155522	
Bromoform	ND	1.0	155522	
Isopropylbenzene	6.9	0.5	155522	
1,1,2,2-Tetrachloroethane	ND	0.5	155522	
1,2,3-Trichloropropane	ND	0.5	155522	
Propylbenzene	6.0	0.5	155522	
Bromobenzene	ND	0.5	155522	
1,3,5-Trimethylbenzene	ND	0.5	155522	
2-Chlorotoluene	ND	0.5	155522	
4-Chlorotoluene	ND	0.5	155522	
tert-Butylbenzene	1.0	0.5	155522	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-55A-9C1	Diln Fac:	1.000
Lab ID:	215071-007	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09

Analyte	Result	RL	Batch#	ADEQ Flags
1,2,4-Trimethylbenzene	1.0	0.5	155522	
sec-Butylbenzene	4.8	0.5	155522	
para-Isopropyl Toluene	ND	0.5	155522	
1,3-Dichlorobenzene	ND	0.5	155522	
1,4-Dichlorobenzene	ND	0.5	155522	
n-Butylbenzene	8.2	0.5	155514	
1,2-Dichlorobenzene	ND	0.5	155522	
1,2-Dibromo-3-Chloropropane	ND	2.0	155522	
1,2,4-Trichlorobenzene	ND	0.5	155522	
Hexachlorobutadiene	ND	2.0	155522	
Naphthalene	14	2.0	155522	
1,2,3-Trichlorobenzene	ND	0.5	155522	
Xylene (total)	2.4	0.5	155522	

Surrogate	%REC	Limits	Batch#	ADEQ Flags
Dibromofluoromethane	100	77-120	155514	
Dibromofluoromethane	104	77-120	155522	
1,2-Dichloroethane-d4	101	70-127	155514	
1,2-Dichloroethane-d4	113	70-127	155522	
Toluene-d8	100	83-125	155514	
Toluene-d8	101	83-125	155522	
Bromofluorobenzene	104	78-120	155514	
Bromofluorobenzene	102	78-120	155522	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-63A-9C1	Batch#:	155514
Lab ID:	215071-008	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	50.00		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	50	D1
Chloromethane	ND	50	D1
Vinyl Chloride	ND	25	D1
Bromomethane	ND	50	D1
Chloroethane	ND	50	D1 V1
Trichlorofluoromethane	ND	50	D1
Iodomethane	ND	500	D1
Acetone	ND	500	D1
1,1-Dichloroethene	ND	25	D1
Methylene Chloride	ND	500	D1
Carbon Disulfide	ND	25	D1
MTBE	82	25	D1
trans-1,2-Dichloroethene	ND	25	D1
Vinyl Acetate	ND	500	D1
1,1-Dichloroethane	ND	25	D1
2-Butanone	ND	500	D1
cis-1,2-Dichloroethene	ND	25	D1
2,2-Dichloropropane	ND	25	D1
Chloroform	ND	25	D1
Bromochloromethane	ND	25	D1
1,1,1-Trichloroethane	ND	25	D1
1,1-Dichloropropene	ND	25	D1
Carbon Tetrachloride	ND	25	D1
1,2-Dichloroethane	ND	25	D1
Benzene	1,400	25	D1
Trichloroethene	ND	25	D1
1,2-Dichloropropane	ND	25	D1
Bromodichloromethane	ND	25	D1
Dibromomethane	ND	25	D1
4-Methyl-2-Pentanone	ND	500	D1
cis-1,3-Dichloropropene	ND	25	D1
Toluene	ND	25	D1
trans-1,3-Dichloropropene	ND	25	D1
1,1,2-Trichloroethane	ND	25	D1
2-Hexanone	ND	500	D1
1,3-Dichloropropane	ND	25	D1
Tetrachloroethene	ND	25	D1

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-63A-9C1	Batch#:	155514
Lab ID:	215071-008	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	50.00		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	25	D1
1,2-Dibromoethane	ND	25	D1
Chlorobenzene	ND	25	D1
1,1,1,2-Tetrachloroethane	ND	25	D1
Ethylbenzene	ND	25	D1
m,p-Xylenes	ND	25	D1
o-Xylene	ND	25	D1
Styrene	ND	25	D1
Bromoform	ND	50	D1
Isopropylbenzene	64	25	D1
1,1,2,2-Tetrachloroethane	ND	25	D1
1,2,3-Trichloropropane	ND	25	D1
Propylbenzene	48	25	D1
Bromobenzene	ND	25	D1
1,3,5-Trimethylbenzene	ND	25	D1
2-Chlorotoluene	ND	25	D1
4-Chlorotoluene	ND	25	D1
tert-Butylbenzene	ND	25	D1
1,2,4-Trimethylbenzene	ND	25	D1
sec-Butylbenzene	ND	25	D1
para-Isopropyl Toluene	ND	25	D1
1,3-Dichlorobenzene	ND	25	D1
1,4-Dichlorobenzene	ND	25	D1
n-Butylbenzene	ND	25	D1
1,2-Dichlorobenzene	ND	25	D1
1,2-Dibromo-3-Chloropropane	ND	100	D1
1,2,4-Trichlorobenzene	ND	25	D1
Hexachlorobutadiene	ND	100	D1
Naphthalene	190	100	D1 L1
1,2,3-Trichlorobenzene	ND	25	D1
Xylene (total)	ND	25	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-533-9C1	Batch#:	155523
Lab ID:	215071-009	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V9
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	17	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-533-9C1	Batch#:	155523
Lab ID:	215071-009	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	V9
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	L1 V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	112	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	86	83-125	
Bromofluorobenzene	94	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091809A	Batch#:	155514
Lab ID:	215071-010	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091809A	Batch#:	155514
Lab ID:	215071-010	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-9C1	Batch#:	155514
Lab ID:	215071-011	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	3.6	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	42	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	18	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	3.4	0.5	
Trichloroethene	1.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-9C1	Batch#:	155514
Lab ID:	215071-011	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	1.1	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	1.0	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	0.5	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	0.7	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-37A-9C1	Batch#:	155514
Lab ID:	215071-012	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	7.0	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	46	0.5	
Trichloroethene	1.2	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-37A-9C1	Batch#:	155514
Lab ID:	215071-012	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	1.4	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	8.8	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	6.7	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	3.6	0.5	
sec-Butylbenzene	2.2	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	1.4	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	10	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155528
Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155528
Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	106	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	105	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514489	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514489	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514490	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.51	110	56-140	
Chloromethane	25.00	24.63	99	46-142	
Vinyl Chloride	25.00	24.66	99	49-136	
Bromomethane	25.00	25.23	101	42-154	
Chloroethane	25.00	24.55 b	98	51-133	V3
Trichlorofluoromethane	25.00	26.09	104	63-135	
Iodomethane	25.00	27.16	109	70-130	
Acetone	25.00	28.27	113	48-130	
1,1-Dichloroethene	25.00	25.34	101	68-133	
Methylene Chloride	25.00	24.75	99	71-120	
Carbon Disulfide	25.00	20.99	84	56-120	
MTBE	25.00	25.35	101	58-120	
trans-1,2-Dichloroethene	25.00	26.21	105	80-120	
Vinyl Acetate	25.00	26.14	105	63-124	
1,1-Dichloroethane	25.00	25.76	103	77-120	
2-Butanone	25.00	28.00	112	57-120	
cis-1,2-Dichloroethene	25.00	25.48	102	75-120	
2,2-Dichloropropane	25.00	26.68	107	72-128	
Chloroform	25.00	25.11	100	78-120	
Bromochloromethane	25.00	26.53	106	78-120	
1,1,1-Trichloroethane	25.00	26.19	105	78-120	
1,1-Dichloropropene	25.00	27.10	108	75-120	
Carbon Tetrachloride	25.00	26.72	107	80-120	
1,2-Dichloroethane	25.00	26.79	107	74-120	
Benzene	25.00	25.76	103	77-120	
Trichloroethene	25.00	25.89	104	78-122	
1,2-Dichloropropane	25.00	25.72	103	76-120	
Bromodichloromethane	25.00	26.63	107	78-120	
Dibromomethane	25.00	27.06	108	77-120	
4-Methyl-2-Pentanone	25.00	27.46	110	65-120	
cis-1,3-Dichloropropene	25.00	27.96	112	76-120	
Toluene	25.00	25.10	100	73-120	
trans-1,3-Dichloropropene	25.00	25.70	103	72-120	
1,1,2-Trichloroethane	25.00	27.83	111	76-120	
2-Hexanone	25.00	27.59	110	57-121	
1,3-Dichloropropane	25.00	27.90	112	75-120	
Tetrachloroethene	25.00	26.96	108	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514490	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	27.71	111	76-120	
1,2-Dibromoethane	25.00	27.89	112	77-120	
Chlorobenzene	25.00	26.08	104	78-120	
1,1,1,2-Tetrachloroethane	25.00	26.58	106	77-120	
Ethylbenzene	25.00	26.32	105	78-120	
m,p-Xylenes	50.00	52.90	106	77-120	
o-Xylene	25.00	26.28	105	77-120	
Styrene	25.00	26.83	107	77-120	
Bromoform	25.00	28.39	114	74-121	
Isopropylbenzene	25.00	23.76	95	71-120	
1,1,2,2-Tetrachloroethane	25.00	28.40	114	73-120	
1,2,3-Trichloropropane	25.00	28.18	113	72-120	
Propylbenzene	25.00	26.88	108	76-120	
Bromobenzene	25.00	26.46	106	75-120	
1,3,5-Trimethylbenzene	25.00	26.84	107	77-120	
2-Chlorotoluene	25.00	26.40	106	76-120	
4-Chlorotoluene	25.00	25.98	104	78-120	
tert-Butylbenzene	25.00	27.34	109	76-120	
1,2,4-Trimethylbenzene	25.00	26.50	106	77-120	
sec-Butylbenzene	25.00	28.22	113	80-120	
para-Isopropyl Toluene	25.00	26.66	107	76-120	
1,3-Dichlorobenzene	25.00	26.24	105	75-120	
1,4-Dichlorobenzene	25.00	26.29	105	77-120	
n-Butylbenzene	25.00	28.82	115	76-120	
1,2-Dichlorobenzene	25.00	26.60	106	76-120	
1,2-Dibromo-3-Chloropropane	25.00	27.52	110	65-120	
1,2,4-Trichlorobenzene	25.00	26.65	107	73-121	
Hexachlorobutadiene	25.00	29.26	117	73-123	
Naphthalene	25.00	30.45	122 *	62-121	L1
1,2,3-Trichlorobenzene	25.00	28.11	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Type: MS Lab ID: QC514491

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.8000	100.0	117.5	118	56-140	D1
Chloromethane	<0.8000	100.0	101.6	102	46-142	D1
Vinyl Chloride	<0.4216	100.0	104.7	105	49-136	D1
Bromomethane	<0.8000	100.0	60.72	61	42-154	D1
Chloroethane	<0.8000	100.0	104.8 b	105	51-133	D1 V3
Trichlorofluoromethane	<0.8000	100.0	111.9	112	63-135	D1
Iodomethane	ND	100.0	56.36	56 *	60-140	D1 M2
Acetone	<4.000	100.0	90.29	90	48-130	D1
1,1-Dichloroethene	<0.4158	100.0	107.2	107	68-133	D1
Methylene Chloride	<4.000	100.0	102.0	102	71-120	D1
Carbon Disulfide	<0.4000	100.0	87.28	87	56-120	D1
MTBE	<0.4000	100.0	101.6	102	58-120	D1
trans-1,2-Dichloroethene	<0.4000	100.0	108.6	109	80-120	D1
Vinyl Acetate	<8.000	100.0	104.9	105	63-124	D1
1,1-Dichloroethane	<0.4000	100.0	107.0	107	77-120	D1
2-Butanone	<8.000	100.0	103.0	103	57-120	D1
cis-1,2-Dichloroethene	<0.4000	100.0	104.0	104	75-120	D1
2,2-Dichloropropane	<0.5315	100.0	97.21	97	72-128	D1
Chloroform	<0.4000	100.0	103.3	103	78-120	D1
Bromochloromethane	<0.4893	100.0	106.7	107	78-120	D1
1,1,1-Trichloroethane	<0.5604	100.0	111.3	111	78-120	D1
1,1-Dichloropropene	<0.5258	100.0	112.1	112	75-120	D1
Carbon Tetrachloride	<0.5018	100.0	112.1	112	80-120	D1
1,2-Dichloroethane	<0.4000	100.0	108.8	109	74-120	D1
Benzene	<0.4000	100.0	105.1	105	77-120	D1
Trichloroethene	<0.5864	100.0	106.0	106	78-122	D1
1,2-Dichloropropane	<0.4000	100.0	102.6	103	76-120	D1
Bromodichloromethane	<0.4000	100.0	105.3	105	78-120	D1
Dibromomethane	<0.4000	100.0	108.1	108	77-120	D1
4-Methyl-2-Pentanone	<8.000	100.0	110.6	111	65-120	D1
cis-1,3-Dichloropropene	<0.4000	100.0	108.2	108	76-120	D1
Toluene	<0.4000	100.0	102.0	102	73-120	D1
trans-1,3-Dichloropropene	<0.4000	100.0	98.71	99	72-120	D1
1,1,2-Trichloroethane	<0.5843	100.0	110.9	111	76-120	D1
2-Hexanone	<8.000	100.0	105.4	105	57-121	D1
1,3-Dichloropropane	<0.4000	100.0	112.6	113	75-120	D1
Tetrachloroethene	<0.4712	100.0	108.2	108	77-120	D1
Dibromochloromethane	<0.4465	100.0	104.7	105	76-120	D1
1,2-Dibromoethane	<0.5468	100.0	109.9	110	77-120	D1
Chlorobenzene	<0.5164	100.0	103.5	103	78-120	D1
1,1,1,2-Tetrachloroethane	<0.6243	100.0	104.2	104	77-120	D1
Ethylbenzene	<0.6532	100.0	106.0	106	78-120	D1
m,p-Xylenes	<0.6367	200.0	213.3	107	77-120	D1
o-Xylene	<0.5886	100.0	104.2	104	77-120	D1
Styrene	<0.4424	100.0	105.2	105	77-120	D1
Bromoform	<1.054	100.0	103.6	104	74-121	D1
Isopropylbenzene	<0.4000	100.0	94.96	95	71-120	D1

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,1,2,2-Tetrachloroethane	<0.4992	100.0	112.9	113	73-120	D1
1,2,3-Trichloropropane	<0.5008	100.0	112.5	113	72-120	D1
Propylbenzene	<0.6556	100.0	107.3	107	76-120	D1
Bromobenzene	<0.6197	100.0	103.1	103	75-120	D1
1,3,5-Trimethylbenzene	<0.6167	100.0	106.5	107	77-120	D1
2-Chlorotoluene	<0.6302	100.0	104.9	105	76-120	D1
4-Chlorotoluene	<0.6198	100.0	102.3	102	78-120	D1
tert-Butylbenzene	<0.4392	100.0	108.4	108	76-120	D1
1,2,4-Trimethylbenzene	<0.5143	100.0	104.3	104	77-120	D1
sec-Butylbenzene	<0.4000	100.0	111.1	111	80-120	D1
para-Isopropyl Toluene	<0.4000	100.0	103.6	104	76-120	D1
1,3-Dichlorobenzene	<0.5361	100.0	101.8	102	75-120	D1
1,4-Dichlorobenzene	<0.6109	100.0	102.0	102	77-120	D1
n-Butylbenzene	<0.6564	100.0	110.2	110	76-120	D1
1,2-Dichlorobenzene	<0.5498	100.0	103.2	103	76-120	D1
1,2-Dibromo-3-Chloropropane	<1.600	100.0	106.3	106	65-120	D1
1,2,4-Trichlorobenzene	<0.5361	100.0	98.90	99	73-121	D1
Hexachlorobutadiene	<1.600	100.0	103.9	104	73-123	D1
Naphthalene	<1.600	100.0	118.3	118	62-121	D1
1,2,3-Trichlorobenzene	<0.4139	100.0	106.0	106	66-123	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Type: MSD Lab ID: QC514492

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	100.0	112.1	112	56-140	5	24	D1
Chloromethane	100.0	97.21	97	46-142	4	24	D1
Vinyl Chloride	100.0	98.37	98	49-136	6	24	D1
Bromomethane	100.0	71.11	71	42-154	16	24	D1
Chloroethane	100.0	99.41 b	99	51-133	5	25	D1 V3
Trichlorofluoromethane	100.0	107.3	107	63-135	4	20	D1
Iodomethane	100.0	70.04	70	60-140	22	30	D1
Acetone	100.0	89.01	89	48-130	1	41	D1
1,1-Dichloroethene	100.0	103.7	104	68-133	3	20	D1
Methylene Chloride	100.0	100.4	100	71-120	2	20	D1
Carbon Disulfide	100.0	84.13	84	56-120	4	20	D1
MTBE	100.0	100.5	100	58-120	1	21	D1
trans-1,2-Dichloroethene	100.0	105.7	106	80-120	3	24	D1
Vinyl Acetate	100.0	102.6	103	63-124	2	24	D1
1,1-Dichloroethane	100.0	104.4	104	77-120	2	20	D1
2-Butanone	100.0	100.5	101	57-120	2	32	D1
cis-1,2-Dichloroethene	100.0	101.6	102	75-120	2	20	D1
2,2-Dichloropropane	100.0	93.66	94	72-128	4	24	D1
Chloroform	100.0	101.8	102	78-120	1	20	D1
Bromochloromethane	100.0	104.3	104	78-120	2	20	D1
1,1,1-Trichloroethane	100.0	108.7	109	78-120	2	20	D1
1,1-Dichloropropene	100.0	108.2	108	75-120	4	21	D1
Carbon Tetrachloride	100.0	107.8	108	80-120	4	21	D1
1,2-Dichloroethane	100.0	107.3	107	74-120	1	20	D1
Benzene	100.0	101.9	102	77-120	3	20	D1
Trichloroethene	100.0	102.9	103	78-122	3	20	D1
1,2-Dichloropropane	100.0	101.1	101	76-120	1	20	D1
Bromodichloromethane	100.0	103.6	104	78-120	2	20	D1
Dibromomethane	100.0	106.1	106	77-120	2	20	D1
4-Methyl-2-Pentanone	100.0	105.4	105	65-120	5	22	D1
cis-1,3-Dichloropropene	100.0	106.9	107	76-120	1	20	D1
Toluene	100.0	99.43	99	73-120	3	20	D1
trans-1,3-Dichloropropene	100.0	96.84	97	72-120	2	20	D1
1,1,2-Trichloroethane	100.0	108.0	108	76-120	3	20	D1
2-Hexanone	100.0	102.6	103	57-121	3	25	D1
1,3-Dichloropropane	100.0	110.4	110	75-120	2	20	D1
Tetrachloroethene	100.0	104.6	105	77-120	3	20	D1
Dibromochloromethane	100.0	103.9	104	76-120	1	20	D1
1,2-Dibromoethane	100.0	108.0	108	77-120	2	20	D1
Chlorobenzene	100.0	101.6	102	78-120	2	20	D1
1,1,1,2-Tetrachloroethane	100.0	102.5	103	77-120	2	20	D1
Ethylbenzene	100.0	103.2	103	78-120	3	26	D1
m,p-Xylenes	200.0	206.8	103	77-120	3	20	D1
o-Xylene	100.0	101.6	102	77-120	2	20	D1
Styrene	100.0	103.3	103	77-120	2	20	D1
Bromoform	100.0	101.2	101	74-121	2	21	D1
Isopropylbenzene	100.0	92.84	93	71-120	2	20	D1

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,1,2,2-Tetrachloroethane	100.0	109.5	110	73-120	3	20	D1
1,2,3-Trichloropropane	100.0	110.0	110	72-120	2	20	D1
Propylbenzene	100.0	104.9	105	76-120	2	20	D1
Bromobenzene	100.0	101.9	102	75-120	1	20	D1
1,3,5-Trimethylbenzene	100.0	104.4	104	77-120	2	20	D1
2-Chlorotoluene	100.0	103.7	104	76-120	1	20	D1
4-Chlorotoluene	100.0	100.8	101	78-120	1	20	D1
tert-Butylbenzene	100.0	106.4	106	76-120	2	21	D1
1,2,4-Trimethylbenzene	100.0	103.0	103	77-120	1	20	D1
sec-Butylbenzene	100.0	109.0	109	80-120	2	21	D1
para-Isopropyl Toluene	100.0	101.9	102	76-120	2	20	D1
1,3-Dichlorobenzene	100.0	99.99	100	75-120	2	20	D1
1,4-Dichlorobenzene	100.0	101.0	101	77-120	1	23	D1
n-Butylbenzene	100.0	108.7	109	76-120	1	21	D1
1,2-Dichlorobenzene	100.0	102.3	102	76-120	1	20	D1
1,2-Dibromo-3-Chloropropane	100.0	103.6	104	65-120	3	22	D1
1,2,4-Trichlorobenzene	100.0	99.67	100	73-121	1	20	D1
Hexachlorobutadiene	100.0	103.4	103	73-123	0	25	D1
Naphthalene	100.0	116.9	117	62-121	1	32	D1
1,2,3-Trichlorobenzene	100.0	106.9	107	66-123	1	29	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155522
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514544

Analyte	Spiked	Result		%REC		Limits	ADEQ Flags
Freon 12	25.00	31.64	b	127		56-140	V3
Chloromethane	25.00	23.05		92		46-142	
Vinyl Chloride	25.00	25.04		100		49-136	
Bromomethane	25.00	20.11	b	80		42-154	
Chloroethane	25.00	24.54		98		51-133	
Trichlorofluoromethane	25.00	28.59		114		63-135	
Iodomethane	25.00	21.93	b	88		70-130	
Acetone	25.00	21.98	b	88		48-130	
1,1-Dichloroethene	25.00	26.88		108		68-133	
Methylene Chloride	25.00	26.65		107		71-120	
Carbon Disulfide	25.00	23.91		96		56-120	
MTBE	25.00	23.50		94		58-120	
trans-1,2-Dichloroethene	25.00	28.49		114		80-120	
Vinyl Acetate	25.00	25.06	b	100		63-124	R2
1,1-Dichloroethane	25.00	28.06		112		77-120	
2-Butanone	25.00	21.79		87		57-120	
cis-1,2-Dichloroethene	25.00	27.42		110		75-120	
2,2-Dichloropropane	25.00	33.60	b	134	*	72-128	L1 V3
Chloroform	25.00	27.95		112		78-120	
Bromochloromethane	25.00	28.05		112		78-120	
1,1,1-Trichloroethane	25.00	29.62		118		78-120	
1,1-Dichloropropene	25.00	30.14	b	121	*	75-120	L1 V3
Carbon Tetrachloride	25.00	30.55	b	122	*	80-120	L1 V3
1,2-Dichloroethane	25.00	28.23		113		74-120	
Benzene	25.00	28.37		113		77-120	
Trichloroethene	25.00	28.17		113		78-122	
1,2-Dichloropropane	25.00	28.34		113		76-120	
Bromodichloromethane	25.00	28.38		114		78-120	
Dibromomethane	25.00	27.92		112		77-120	
4-Methyl-2-Pentanone	25.00	23.24		93		65-120	
cis-1,3-Dichloropropene	25.00	29.47		118		76-120	
Toluene	25.00	26.73		107		73-120	
trans-1,3-Dichloropropene	25.00	25.39		102		72-120	
1,1,2-Trichloroethane	25.00	27.10		108		76-120	
2-Hexanone	25.00	22.63		91		57-121	
1,3-Dichloropropane	25.00	27.25		109		75-120	
Tetrachloroethene	25.00	30.01		120		77-120	
Dibromochloromethane	25.00	26.98		108		76-120	
1,2-Dibromoethane	25.00	26.41		106		77-120	
Chlorobenzene	25.00	27.70		111		78-120	
1,1,1,2-Tetrachloroethane	25.00	28.61		114		77-120	
Ethylbenzene	25.00	28.63		115		78-120	
m,p-Xylenes	50.00	55.75		111		77-120	
o-Xylene	25.00	28.18		113		77-120	
Styrene	25.00	28.00		112		77-120	
Bromoform	25.00	23.55		94		74-121	
Isopropylbenzene	25.00	25.06		100		71-120	
1,1,2,2-Tetrachloroethane	25.00	25.74		103		73-120	
1,2,3-Trichloropropane	25.00	25.37		101		72-120	
Propylbenzene	25.00	28.35		113		76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155522
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	28.18	113	75-120	
1,3,5-Trimethylbenzene	25.00	28.04	112	77-120	
2-Chlorotoluene	25.00	28.32	113	76-120	
4-Chlorotoluene	25.00	27.23	109	78-120	
tert-Butylbenzene	25.00	28.11	112	76-120	
1,2,4-Trimethylbenzene	25.00	27.25	109	77-120	
sec-Butylbenzene	25.00	28.55	114	80-120	
para-Isopropyl Toluene	25.00	26.85	107	76-120	
1,3-Dichlorobenzene	25.00	26.92	108	75-120	
1,4-Dichlorobenzene	25.00	26.58	106	77-120	
n-Butylbenzene	25.00	27.95 b	112	76-120	
1,2-Dichlorobenzene	25.00	26.47	106	76-120	
1,2-Dibromo-3-Chloropropane	25.00	23.51	94	65-120	
1,2,4-Trichlorobenzene	25.00	23.24	93	73-121	
Hexachlorobutadiene	25.00	27.21 b	109	73-123	
Naphthalene	25.00	24.75	99	62-121	
1,2,3-Trichlorobenzene	25.00	24.08	96	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155522
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514545

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	30.53 b	122	56-140	4	24	V3
Chloromethane	25.00	23.84	95	46-142	3	24	
Vinyl Chloride	25.00	24.96	100	49-136	0	24	
Bromomethane	25.00	21.39 b	86	42-154	6	24	
Chloroethane	25.00	25.70	103	51-133	5	25	
Trichlorofluoromethane	25.00	29.28	117	63-135	2	20	
Iodomethane	25.00	22.05 b	88	70-130	1	20	
Acetone	25.00	23.38 b	94	48-130	6	41	
1,1-Dichloroethene	25.00	24.31	97	68-133	10	20	
Methylene Chloride	25.00	24.24	97	71-120	9	20	
Carbon Disulfide	25.00	21.43	86	56-120	11	20	
MTBE	25.00	25.43	102	58-120	8	21	
trans-1,2-Dichloroethene	25.00	25.31	101	80-120	12	24	
Vinyl Acetate	25.00	19.75 b	79	63-124	24	24	R2
1,1-Dichloroethane	25.00	25.22	101	77-120	11	20	
2-Butanone	25.00	22.97	92	57-120	5	32	
cis-1,2-Dichloroethene	25.00	24.99	100	75-120	9	20	
2,2-Dichloropropane	25.00	30.78 b	123	72-128	9	24	V3
Chloroform	25.00	25.41	102	78-120	10	20	
Bromochloromethane	25.00	25.75	103	78-120	9	20	
1,1,1-Trichloroethane	25.00	27.18	109	78-120	9	20	
1,1-Dichloropropene	25.00	26.85 b	107	75-120	12	21	V3
Carbon Tetrachloride	25.00	27.81 b	111	80-120	9	21	V3
1,2-Dichloroethane	25.00	27.18	109	74-120	4	20	
Benzene	25.00	25.54	102	77-120	10	20	
Trichloroethene	25.00	26.08	104	78-122	8	20	
1,2-Dichloropropane	25.00	25.39	102	76-120	11	20	
Bromodichloromethane	25.00	26.76	107	78-120	6	20	
Dibromomethane	25.00	26.38	106	77-120	6	20	
4-Methyl-2-Pentanone	25.00	24.48	98	65-120	5	22	
cis-1,3-Dichloropropene	25.00	27.04	108	76-120	9	20	
Toluene	25.00	24.40	98	73-120	9	20	
trans-1,3-Dichloropropene	25.00	24.48	98	72-120	4	20	
1,1,2-Trichloroethane	25.00	26.21	105	76-120	3	20	
2-Hexanone	25.00	24.39	98	57-121	7	25	
1,3-Dichloropropane	25.00	26.55	106	75-120	3	20	
Tetrachloroethene	25.00	27.30	109	77-120	9	20	
Dibromochloromethane	25.00	26.34	105	76-120	2	20	
1,2-Dibromoethane	25.00	26.15	105	77-120	1	20	
Chlorobenzene	25.00	25.22	101	78-120	9	20	
1,1,1,2-Tetrachloroethane	25.00	26.95	108	77-120	6	20	
Ethylbenzene	25.00	26.11	104	78-120	9	26	
m,p-Xylenes	50.00	51.05	102	77-120	9	20	
o-Xylene	25.00	25.73	103	77-120	9	20	
Styrene	25.00	25.91	104	77-120	8	20	
Bromoform	25.00	24.80	99	74-121	5	21	
Isopropylbenzene	25.00	23.05	92	71-120	8	20	
1,1,2,2-Tetrachloroethane	25.00	25.64	103	73-120	0	20	
1,2,3-Trichloropropane	25.00	26.05	104	72-120	3	20	
Propylbenzene	25.00	26.19	105	76-120	8	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155522
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	25.00	26.04	104	75-120	8	20	
1,3,5-Trimethylbenzene	25.00	26.53	106	77-120	6	20	
2-Chlorotoluene	25.00	26.38	106	76-120	7	20	
4-Chlorotoluene	25.00	25.30	101	78-120	7	20	
tert-Butylbenzene	25.00	26.45	106	76-120	6	21	
1,2,4-Trimethylbenzene	25.00	25.45	102	77-120	7	20	
sec-Butylbenzene	25.00	27.19	109	80-120	5	21	
para-Isopropyl Toluene	25.00	25.50	102	76-120	5	20	
1,3-Dichlorobenzene	25.00	25.29	101	75-120	6	20	
1,4-Dichlorobenzene	25.00	25.12	100	77-120	6	23	
n-Butylbenzene	25.00	26.53 b	106	76-120	5	21	
1,2-Dichlorobenzene	25.00	25.45	102	76-120	4	20	
1,2-Dibromo-3-Chloropropane	25.00	25.37	101	65-120	8	22	
1,2,4-Trichlorobenzene	25.00	24.29	97	73-121	4	20	
Hexachlorobutadiene	25.00	27.07 b	108	73-123	1	25	
Naphthalene	25.00	26.72	107	62-121	8	32	
1,2,3-Trichlorobenzene	25.00	25.81	103	66-123	7	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514546	Batch#:	155522
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	R2
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	L1 V1
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514546	Batch#:	155522
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514547	Batch#:	155523
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	20.00	20.95	105	56-140	
Chloromethane	20.00	20.84	104	46-142	
Vinyl Chloride	20.00	19.88	99	49-136	
Bromomethane	20.00	19.31	97	42-154	
Chloroethane	20.00	15.04 b	75	51-133	V9
Trichlorofluoromethane	20.00	21.32	107	63-135	
Iodomethane	20.00	28.71 b	144 *	70-130	L1 V3
Acetone	20.00	21.06	105	48-130	
1,1-Dichloroethene	20.00	21.90	109	68-133	
Methylene Chloride	20.00	22.09	110	71-120	
Carbon Disulfide	20.00	19.88	99	56-120	
MTBE	20.00	21.24	106	58-120	
trans-1,2-Dichloroethene	20.00	23.60	118	80-120	
Vinyl Acetate	20.00	18.07	90	63-124	
1,1-Dichloroethane	20.00	21.26	106	77-120	
2-Butanone	20.00	20.10	100	57-120	
cis-1,2-Dichloroethene	20.00	22.32	112	75-120	
2,2-Dichloropropane	20.00	22.99	115	72-128	
Chloroform	20.00	21.70	108	78-120	
Bromochloromethane	20.00	24.02	120	78-120	
1,1,1-Trichloroethane	20.00	23.59	118	78-120	
1,1-Dichloropropene	20.00	20.50	103	75-120	
Carbon Tetrachloride	20.00	22.28	111	80-120	
1,2-Dichloroethane	20.00	20.65	103	74-120	
Benzene	20.00	20.95	105	77-120	
Trichloroethene	20.00	23.55	118	78-122	
1,2-Dichloropropane	20.00	20.23	101	76-120	
Bromodichloromethane	20.00	22.65	113	78-120	
Dibromomethane	20.00	22.19	111	77-120	
4-Methyl-2-Pentanone	20.00	18.10	91	65-120	
cis-1,3-Dichloropropene	20.00	22.99	115	76-120	
Toluene	20.00	18.18	91	73-120	
trans-1,3-Dichloropropene	20.00	16.76	84	72-120	
1,1,2-Trichloroethane	20.00	18.49	92	76-120	
2-Hexanone	20.00	13.83 b	69	57-121	V9
1,3-Dichloropropane	20.00	18.30	92	75-120	
Tetrachloroethene	20.00	19.31	97	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514547	Batch#:	155523
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	20.00	19.67	98	76-120	
1,2-Dibromoethane	20.00	19.09	95	77-120	
Chlorobenzene	20.00	18.53	93	78-120	
1,1,1,2-Tetrachloroethane	20.00	19.01	95	77-120	
Ethylbenzene	20.00	18.64	93	78-120	
m,p-Xylenes	40.00	33.47	84	77-120	
o-Xylene	20.00	16.45	82	77-120	
Styrene	20.00	16.98	85	77-120	
Bromoform	20.00	18.66	93	74-121	
Isopropylbenzene	20.00	15.76 b	79	71-120	V9
1,1,2,2-Tetrachloroethane	20.00	18.78	94	73-120	
1,2,3-Trichloropropane	20.00	21.97	110	72-120	
Propylbenzene	20.00	15.90	80	76-120	
Bromobenzene	20.00	22.89	114	75-120	
1,3,5-Trimethylbenzene	20.00	23.01	115	77-120	
2-Chlorotoluene	20.00	19.86	99	76-120	
4-Chlorotoluene	20.00	17.80	89	78-120	
tert-Butylbenzene	20.00	15.48 b	77	76-120	V9
1,2,4-Trimethylbenzene	20.00	24.50 b	123 *	77-120	L1 V3
sec-Butylbenzene	20.00	16.93	85	80-120	
para-Isopropyl Toluene	20.00	21.96	110	76-120	
1,3-Dichlorobenzene	20.00	19.07	95	75-120	
1,4-Dichlorobenzene	20.00	18.48	92	77-120	
n-Butylbenzene	20.00	29.91 b	150 *	76-120	L1 V3
1,2-Dichlorobenzene	20.00	19.89	99	76-120	
1,2-Dibromo-3-Chloropropane	20.00	17.62	88	65-120	
1,2,4-Trichlorobenzene	20.00	25.10 b	125 *	73-121	L1 V3
Hexachlorobutadiene	20.00	21.70	109	73-123	
Naphthalene	20.00	26.61 b	133 *	62-121	L1 V3
1,2,3-Trichlorobenzene	20.00	26.21 b	131 *	66-123	L1 V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	112	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514548	Batch#:	155523
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V9
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	V9
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514548	Batch#:	155523
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	V9
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	V9
1,2,4-Trimethylbenzene	ND	0.5	L1 V1
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	L1 V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	95	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514565

Analyte	Spiked	Result		%REC	Limits	ADEQ Flags
Freon 12	20.00	21.10		105	56-140	
Chloromethane	20.00	20.00		100	46-142	
Vinyl Chloride	20.00	19.55		98	49-136	
Bromomethane	20.00	17.06		85	42-154	
Chloroethane	20.00	25.29	b	126	51-133	V3
Trichlorofluoromethane	20.00	20.34		102	63-135	
Iodomethane	20.00	13.64	b	68 *	70-130	L2 V9
Acetone	20.00	17.77		89	48-130	
1,1-Dichloroethene	20.00	20.76		104	68-133	
Methylene Chloride	20.00	19.85		99	71-120	
Carbon Disulfide	20.00	16.97		85	56-120	
MTBE	20.00	18.75		94	58-120	
trans-1,2-Dichloroethene	20.00	21.00		105	80-120	
Vinyl Acetate	20.00	15.82	b	79	63-124	V9
1,1-Dichloroethane	20.00	20.79		104	77-120	
2-Butanone	20.00	18.74		94	57-120	
cis-1,2-Dichloroethene	20.00	20.17		101	75-120	
2,2-Dichloropropane	20.00	20.01		100	72-128	
Chloroform	20.00	20.15		101	78-120	
Bromochloromethane	20.00	20.30		101	78-120	
1,1,1-Trichloroethane	20.00	21.61		108	78-120	
1,1-Dichloropropene	20.00	22.21		111	75-120	
Carbon Tetrachloride	20.00	21.89		109	80-120	
1,2-Dichloroethane	20.00	20.79		104	74-120	
Benzene	20.00	20.65		103	77-120	
Trichloroethene	20.00	21.46		107	78-122	
1,2-Dichloropropane	20.00	20.16		101	76-120	
Bromodichloromethane	20.00	20.57		103	78-120	
Dibromomethane	20.00	20.58		103	77-120	
4-Methyl-2-Pentanone	20.00	19.81		99	65-120	
cis-1,3-Dichloropropene	20.00	21.39		107	76-120	
Toluene	20.00	20.77		104	73-120	
trans-1,3-Dichloropropene	20.00	19.99		100	72-120	
1,1,2-Trichloroethane	20.00	21.78		109	76-120	
2-Hexanone	20.00	19.98		100	57-121	
1,3-Dichloropropane	20.00	22.25		111	75-120	
Tetrachloroethene	20.00	22.46		112	77-120	
Dibromochloromethane	20.00	20.86		104	76-120	
1,2-Dibromoethane	20.00	21.62		108	77-120	
Chlorobenzene	20.00	21.13		106	78-120	
1,1,1,2-Tetrachloroethane	20.00	21.16		106	77-120	
Ethylbenzene	20.00	21.65		108	78-120	
m,p-Xylenes	40.00	43.14		108	77-120	
o-Xylene	20.00	21.22		106	77-120	
Styrene	20.00	21.33		107	77-120	
Bromoform	20.00	19.86		99	74-121	
Isopropylbenzene	20.00	20.19		101	71-120	
1,1,2,2-Tetrachloroethane	20.00	21.46		107	73-120	
1,2,3-Trichloropropane	20.00	22.40		112	72-120	
Propylbenzene	20.00	22.83		114	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	20.00	21.69	108	75-120	
1,3,5-Trimethylbenzene	20.00	22.51	113	77-120	
2-Chlorotoluene	20.00	22.30	111	76-120	
4-Chlorotoluene	20.00	21.63	108	78-120	
tert-Butylbenzene	20.00	23.09	115	76-120	
1,2,4-Trimethylbenzene	20.00	22.21	111	77-120	
sec-Butylbenzene	20.00	23.71	119	80-120	
para-Isopropyl Toluene	20.00	22.10	110	76-120	
1,3-Dichlorobenzene	20.00	21.50	108	75-120	
1,4-Dichlorobenzene	20.00	21.50	107	77-120	
n-Butylbenzene	20.00	23.65	118	76-120	
1,2-Dichlorobenzene	20.00	21.69	108	76-120	
1,2-Dibromo-3-Chloropropane	20.00	20.04	100	65-120	
1,2,4-Trichlorobenzene	20.00	20.86	104	73-121	
Hexachlorobutadiene	20.00	22.95	115	73-123	
Naphthalene	20.00	22.66	113	62-121	
1,2,3-Trichlorobenzene	20.00	21.88	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	103	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514566

Analyte	Spiked	Result		%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	20.00	20.95		105	56-140	1	24	
Chloromethane	20.00	19.73		99	46-142	1	24	
Vinyl Chloride	20.00	20.17		101	49-136	3	24	
Bromomethane	20.00	17.62		88	42-154	3	24	
Chloroethane	20.00	20.73	b	104	51-133	20	25	V3
Trichlorofluoromethane	20.00	20.44		102	63-135	0	20	
Iodomethane	20.00	14.18	b	71	70-130	4	20	V9
Acetone	20.00	18.16		91	48-130	2	41	
1,1-Dichloroethene	20.00	20.94		105	68-133	1	20	
Methylene Chloride	20.00	19.70		98	71-120	1	20	
Carbon Disulfide	20.00	16.98		85	56-120	0	20	
MTBE	20.00	18.09		90	58-120	4	21	
trans-1,2-Dichloroethene	20.00	21.16		106	80-120	1	24	
Vinyl Acetate	20.00	13.99	b	70	63-124	12	24	V9
1,1-Dichloroethane	20.00	20.84		104	77-120	0	20	
2-Butanone	20.00	18.15		91	57-120	3	32	
cis-1,2-Dichloroethene	20.00	20.12		101	75-120	0	20	
2,2-Dichloropropane	20.00	19.89		99	72-128	1	24	
Chloroform	20.00	20.06		100	78-120	0	20	
Bromochloromethane	20.00	20.13		101	78-120	1	20	
1,1,1-Trichloroethane	20.00	21.76		109	78-120	1	20	
1,1-Dichloropropene	20.00	22.25		111	75-120	0	21	
Carbon Tetrachloride	20.00	22.11		111	80-120	1	21	
1,2-Dichloroethane	20.00	20.66		103	74-120	1	20	
Benzene	20.00	20.62		103	77-120	0	20	
Trichloroethene	20.00	21.64		108	78-122	1	20	
1,2-Dichloropropane	20.00	20.16		101	76-120	0	20	
Bromodichloromethane	20.00	20.36		102	78-120	1	20	
Dibromomethane	20.00	20.12		101	77-120	2	20	
4-Methyl-2-Pentanone	20.00	18.49		92	65-120	7	22	
cis-1,3-Dichloropropene	20.00	21.10		106	76-120	1	20	
Toluene	20.00	20.77		104	73-120	0	20	
trans-1,3-Dichloropropene	20.00	19.42		97	72-120	3	20	
1,1,2-Trichloroethane	20.00	21.16		106	76-120	3	20	
2-Hexanone	20.00	18.70		94	57-121	7	25	
1,3-Dichloropropane	20.00	21.70		108	75-120	3	20	
Tetrachloroethene	20.00	22.52		113	77-120	0	20	
Dibromochloromethane	20.00	20.37		102	76-120	2	20	
1,2-Dibromoethane	20.00	20.77		104	77-120	4	20	
Chlorobenzene	20.00	20.86		104	78-120	1	20	
1,1,1,2-Tetrachloroethane	20.00	20.94		105	77-120	1	20	
Ethylbenzene	20.00	21.49		107	78-120	1	26	
m,p-Xylenes	40.00	43.05		108	77-120	0	20	
o-Xylene	20.00	21.00		105	77-120	1	20	
Styrene	20.00	20.98		105	77-120	2	20	
Bromoform	20.00	18.92		95	74-121	5	21	
Isopropylbenzene	20.00	19.69		98	71-120	2	20	
1,1,2,2-Tetrachloroethane	20.00	19.74		99	73-120	8	20	
1,2,3-Trichloropropane	20.00	20.89		104	72-120	7	20	
Propylbenzene	20.00	22.30		112	76-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	20.00	21.07	105	75-120	3	20	
1,3,5-Trimethylbenzene	20.00	22.07	110	77-120	2	20	
2-Chlorotoluene	20.00	21.78	109	76-120	2	20	
4-Chlorotoluene	20.00	21.10	106	78-120	2	20	
tert-Butylbenzene	20.00	22.47	112	76-120	3	21	
1,2,4-Trimethylbenzene	20.00	21.63	108	77-120	3	20	
sec-Butylbenzene	20.00	23.12	116	80-120	3	21	
para-Isopropyl Toluene	20.00	21.49	107	76-120	3	20	
1,3-Dichlorobenzene	20.00	20.98	105	75-120	2	20	
1,4-Dichlorobenzene	20.00	20.97	105	77-120	2	23	
n-Butylbenzene	20.00	22.83	114	76-120	4	21	
1,2-Dichlorobenzene	20.00	20.99	105	76-120	3	20	
1,2-Dibromo-3-Chloropropane	20.00	18.10	91	65-120	10	22	
1,2,4-Trichlorobenzene	20.00	19.91	100	73-121	5	20	
Hexachlorobutadiene	20.00	22.03	110	73-123	4	25	
Naphthalene	20.00	20.74	104	62-121	9	32	
1,2,3-Trichlorobenzene	20.00	20.90	104	66-123	5	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155523
MSS Lab ID:	215263-004	Sampled:	09/24/09
Matrix:	Water	Received:	09/28/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	100.0		

Type: MS Lab ID: QC514583

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<20.00	2,000	2,777	139	56-140	D2
Chloromethane	<20.00	2,000	2,538	127	46-142	D2
Vinyl Chloride	<10.00	2,000	2,405	120	49-136	D2
Bromomethane	<20.00	2,000	2,345	117	42-154	D2
Chloroethane	<20.00	2,000	1,816 b	91	51-133	D2 V9
Trichlorofluoromethane	<20.00	2,000	2,662	133	63-135	D2
Iodomethane	<200.0	2,000	2,972 b	149 *	60-140	D2 M1 V3
Acetone	853.5	2,000	3,019	108	48-130	D2
1,1-Dichloroethene	<10.00	2,000	2,421	121	68-133	D2
Methylene Chloride	14.09	2,000	2,405	120	71-120	D2
Carbon Disulfide	<10.00	2,000	2,256	113	56-120	D2
MTBE	<10.00	2,000	2,173	109	58-120	D2
trans-1,2-Dichloroethene	<10.00	2,000	2,584	129 *	80-120	D2 M1
Vinyl Acetate	<200.0	2,000	1,853	93	63-124	D2
1,1-Dichloroethane	<10.00	2,000	2,361	118	77-120	D2
2-Butanone	<200.0	2,000	2,057	103	57-120	D2
cis-1,2-Dichloroethene	<10.00	2,000	2,394	120	75-120	D2
2,2-Dichloropropane	<10.00	2,000	2,465	123	72-128	D2
Chloroform	14.10	2,000	2,421	120	78-120	D2
Bromochloromethane	<10.00	2,000	2,568	128 *	78-120	D2 M1
1,1,1-Trichloroethane	<11.31	2,000	2,766	138 *	78-120	D2 M1
1,1-Dichloropropene	<10.00	2,000	2,189	109	75-120	D2
Carbon Tetrachloride	<10.00	2,000	2,498	125 *	80-120	D2 M1
1,2-Dichloroethane	<10.00	2,000	2,237	112	74-120	D2
Benzene	<10.00	2,000	2,195	110	77-120	D2
Trichloroethene	<10.00	2,000	2,486	124 *	78-122	D2 M1
1,2-Dichloropropane	<10.00	2,000	2,073	104	76-120	D2
Bromodichloromethane	<10.00	2,000	2,390	119	78-120	D2
Dibromomethane	<10.00	2,000	2,249	112	77-120	D2
4-Methyl-2-Pentanone	<200.0	2,000	1,807	90	65-120	D2
cis-1,3-Dichloropropene	<10.00	2,000	2,352	118	76-120	D2
Toluene	<10.00	2,000	1,854	93	73-120	D2
trans-1,3-Dichloropropene	<10.00	2,000	1,638	82	72-120	D2
1,1,2-Trichloroethane	<10.75	2,000	1,818	91	76-120	D2
2-Hexanone	<200.0	2,000	1,292 b	65	57-121	D2 V9
1,3-Dichloropropane	<10.00	2,000	1,806	90	75-120	D2
Tetrachloroethene	<13.16	2,000	1,962	98	77-120	D2
Dibromochloromethane	<10.00	2,000	1,931	97	76-120	D2
1,2-Dibromoethane	<10.00	2,000	1,857	93	77-120	D2
Chlorobenzene	<10.00	2,000	1,877	94	78-120	D2
1,1,1,2-Tetrachloroethane	<10.00	2,000	1,948	97	77-120	D2
Ethylbenzene	<10.00	2,000	1,960	98	78-120	D2
m,p-Xylenes	<15.94	4,000	3,584	90	77-120	D2
o-Xylene	<10.00	2,000	1,739	87	77-120	D2
Styrene	<10.00	2,000	1,804	90	77-120	D2
Bromoform	<20.00	2,000	1,848	92	74-121	D2
Isopropylbenzene	<10.00	2,000	1,722 b	86	71-120	D2 V9
1,1,2,2-Tetrachloroethane	<10.00	2,000	1,784	89	73-120	D2

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155523
MSS Lab ID:	215263-004	Sampled:	09/24/09
Matrix:	Water	Received:	09/28/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	100.0		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<10.70	2,000	2,143	107	72-120	D2
Propylbenzene	<10.00	2,000	1,662	83	76-120	D2
Bromobenzene	<10.00	2,000	2,263	113	75-120	D2
1,3,5-Trimethylbenzene	<10.00	2,000	2,238	112	77-120	D2
2-Chlorotoluene	<10.00	2,000	2,077	104	76-120	D2
4-Chlorotoluene	<10.00	2,000	1,845	92	78-120	D2
tert-Butylbenzene	<10.00	2,000	1,553 b	78	76-120	D2 V9
1,2,4-Trimethylbenzene	<10.00	2,000	2,372 b	119	77-120	D2 V3
sec-Butylbenzene	<10.29	2,000	1,659	83	80-120	D2
para-Isopropyl Toluene	<10.00	2,000	2,128	106	76-120	D2
1,3-Dichlorobenzene	<10.00	2,000	1,945	97	75-120	D2
1,4-Dichlorobenzene	<10.00	2,000	1,867	93	77-120	D2
n-Butylbenzene	<12.85	2,000	2,922 b	146 *	76-120	D2 M1 V3
1,2-Dichlorobenzene	<10.00	2,000	2,019	101	76-120	D2
1,2-Dibromo-3-Chloropropane	<40.00	2,000	1,679	84	65-120	D2
1,2,4-Trichlorobenzene	<13.29	2,000	2,464 b	123 *	73-121	D2 M1 V3
Hexachlorobutadiene	<40.00	2,000	2,130	107	73-123	D2
Naphthalene	<40.00	2,000	2,586 b	129 *	62-121	D2 M1 V3
1,2,3-Trichlorobenzene	<11.49	2,000	2,606 b	130 *	66-123	D2 M1 V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	85	83-125	
Bromofluorobenzene	112	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155523
MSS Lab ID:	215263-004	Sampled:	09/24/09
Matrix:	Water	Received:	09/28/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	100.0		

Type: MSD Lab ID: QC514584

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	2,000	2,714	136	56-140	2	24	D2
Chloromethane	2,000	2,499	125	46-142	2	24	D2
Vinyl Chloride	2,000	2,426	121	49-136	1	24	D2
Bromomethane	2,000	2,288	114	42-154	2	24	D2
Chloroethane	2,000	1,781 b	89	51-133	2	25	D2 V9
Trichlorofluoromethane	2,000	2,535	127	63-135	5	20	D2
Iodomethane	2,000	3,046 b	152 *	60-140	2	30	D2 M1 V3
Acetone	2,000	2,967	106	48-130	2	41	D2
1,1-Dichloroethene	2,000	2,341	117	68-133	3	20	D2
Methylene Chloride	2,000	2,305	115	71-120	4	20	D2
Carbon Disulfide	2,000	2,139	107	56-120	5	20	D2
MTBE	2,000	2,216	111	58-120	2	21	D2
trans-1,2-Dichloroethene	2,000	2,474	124 *	80-120	4	24	D2 M1
Vinyl Acetate	2,000	1,814	91	63-124	2	24	D2
1,1-Dichloroethane	2,000	2,266	113	77-120	4	20	D2
2-Butanone	2,000	1,987	99	57-120	3	32	D2
cis-1,2-Dichloroethene	2,000	2,332	117	75-120	3	20	D2
2,2-Dichloropropane	2,000	2,321	116	72-128	6	24	D2
Chloroform	2,000	2,296	114	78-120	5	20	D2
Bromochloromethane	2,000	2,495	125 *	78-120	3	20	D2 M1
1,1,1-Trichloroethane	2,000	2,586	129 *	78-120	7	20	D2 M1
1,1-Dichloropropene	2,000	2,121	106	75-120	3	21	D2
Carbon Tetrachloride	2,000	2,388	119	80-120	4	21	D2
1,2-Dichloroethane	2,000	2,158	108	74-120	4	20	D2
Benzene	2,000	2,137	107	77-120	3	20	D2
Trichloroethene	2,000	2,389	119	78-122	4	20	D2
1,2-Dichloropropane	2,000	2,025	101	76-120	2	20	D2
Bromodichloromethane	2,000	2,306	115	78-120	4	20	D2
Dibromomethane	2,000	2,225	111	77-120	1	20	D2
4-Methyl-2-Pentanone	2,000	1,842	92	65-120	2	22	D2
cis-1,3-Dichloropropene	2,000	2,289	114	76-120	3	20	D2
Toluene	2,000	1,782	89	73-120	4	20	D2
trans-1,3-Dichloropropene	2,000	1,606	80	72-120	2	20	D2
1,1,2-Trichloroethane	2,000	1,782	89	76-120	2	20	D2
2-Hexanone	2,000	1,325 b	66	57-121	3	25	D2 V9
1,3-Dichloropropane	2,000	1,774	89	75-120	2	20	D2
Tetrachloroethene	2,000	1,896	95	77-120	3	20	D2
Dibromochloromethane	2,000	1,885	94	76-120	2	20	D2
1,2-Dibromoethane	2,000	1,838	92	77-120	1	20	D2
Chlorobenzene	2,000	1,803	90	78-120	4	20	D2
1,1,1,2-Tetrachloroethane	2,000	1,848	92	77-120	5	20	D2
Ethylbenzene	2,000	1,860	93	78-120	5	26	D2
m,p-Xylenes	4,000	3,384	85	77-120	6	20	D2
o-Xylene	2,000	1,655	83	77-120	5	20	D2
Styrene	2,000	1,710	86	77-120	5	20	D2
Bromoform	2,000	1,796	90	74-121	3	21	D2
Isopropylbenzene	2,000	1,618 b	81	71-120	6	20	D2 V9
1,1,2,2-Tetrachloroethane	2,000	1,732	87	73-120	3	20	D2

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155523
MSS Lab ID:	215263-004	Sampled:	09/24/09
Matrix:	Water	Received:	09/28/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	100.0		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	2,000	2,095	105	72-120	2	20	D2
Propylbenzene	2,000	1,601	80	76-120	4	20	D2
Bromobenzene	2,000	2,156	108	75-120	5	20	D2
1,3,5-Trimethylbenzene	2,000	2,153	108	77-120	4	20	D2
2-Chlorotoluene	2,000	1,951	98	76-120	6	20	D2
4-Chlorotoluene	2,000	1,776	89	78-120	4	20	D2
tert-Butylbenzene	2,000	1,500 b	75 *	76-120	3	21	D2 M2 V9
1,2,4-Trimethylbenzene	2,000	2,283 b	114	77-120	4	20	D2 V3
sec-Butylbenzene	2,000	1,594	80	80-120	4	21	D2
para-Isopropyl Toluene	2,000	2,043	102	76-120	4	20	D2
1,3-Dichlorobenzene	2,000	1,851	93	75-120	5	20	D2
1,4-Dichlorobenzene	2,000	1,799	90	77-120	4	23	D2
n-Butylbenzene	2,000	2,734 b	137 *	76-120	7	21	D2 M1 V3
1,2-Dichlorobenzene	2,000	1,931	97	76-120	4	20	D2
1,2-Dibromo-3-Chloropropane	2,000	1,678	84	65-120	0	22	D2
1,2,4-Trichlorobenzene	2,000	2,357 b	118	73-121	4	20	D2 V3
Hexachlorobutadiene	2,000	2,019	101	73-123	5	25	D2
Naphthalene	2,000	2,510 b	126 *	62-121	3	32	D2 M1 V3
1,2,3-Trichlorobenzene	2,000	2,468 b	123	66-123	5	29	D2 V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	86	83-125	
Bromofluorobenzene	112	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155522
MSS Lab ID:	215107-009	Sampled:	09/22/09
Matrix:	Water	Received:	09/22/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	33.33		

Type: MS Lab ID: QC514602

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<6.667	833.3	932.3 b	112	56-140	D2 V3
Chloromethane	<6.667	833.3	720.3	86	46-142	D2
Vinyl Chloride	<3.333	833.3	821.3	99	49-136	D2
Bromomethane	<7.847	833.3	556.4 b	67	42-154	D2
Chloroethane	<6.667	833.3	810.1	97	51-133	D2
Trichlorofluoromethane	<6.667	833.3	917.6	110	63-135	D2
Iodomethane	ND	833.3	596.3 b	72	60-140	D2
Acetone	<33.33	833.3	557.2 b	67	48-130	D2
1,1-Dichloroethene	265.1	833.3	1,180	110	68-133	D2
Methylene Chloride	<9.667	833.3	792.7	95	71-120	D2
Carbon Disulfide	<3.333	833.3	803.6	96	56-120	D2
MTBE	<3.333	833.3	781.8	94	58-120	D2
trans-1,2-Dichloroethene	<3.396	833.3	901.8	108	80-120	D2
Vinyl Acetate	<66.67	833.3	1,058 b	127 *	63-124	D2 M1 R2
1,1-Dichloroethane	32.94	833.3	911.7	105	77-120	D2
2-Butanone	<66.67	833.3	664.9	80	57-120	D2
cis-1,2-Dichloroethene	142.0	833.3	999.6	103	75-120	D2
2,2-Dichloropropane	<3.333	833.3	1,148 b	138 *	72-128	D2 M1 V3
Chloroform	3.963	833.3	858.8	103	78-120	D2
Bromochloromethane	<3.333	833.3	842.9	101	78-120	D2
1,1,1-Trichloroethane	227.5	833.3	1,223	119	78-120	D2
1,1-Dichloropropene	<4.495	833.3	989.9 b	119	75-120	D2 V3
Carbon Tetrachloride	<3.333	833.3	1,051 b	126 *	80-120	D2 M1 V3
1,2-Dichloroethane	<3.519	833.3	868.4	104	74-120	D2
Benzene	<3.333	833.3	867.5	104	77-120	D2
Trichloroethene	3,982 >LR	833.3	5,057 >LR	129 NM	78-122	D2 M1 M3
1,2-Dichloropropane	<3.936	833.3	858.7	103	76-120	D2
Bromodichloromethane	<3.333	833.3	868.2	104	78-120	D2
Dibromomethane	<3.476	833.3	842.2	101	77-120	D2
4-Methyl-2-Pentanone	<66.67	833.3	758.0	91	65-120	D2
cis-1,3-Dichloropropene	<3.333	833.3	889.0	107	76-120	D2
Toluene	<3.333	833.3	842.4	101	73-120	D2
trans-1,3-Dichloropropene	<3.333	833.3	775.6	93	72-120	D2
1,1,2-Trichloroethane	<4.405	833.3	841.7	101	76-120	D2
2-Hexanone	<66.67	833.3	718.3	86	57-121	D2
1,3-Dichloropropane	<3.333	833.3	855.2	103	75-120	D2
Tetrachloroethene	4,090 >LR	833.3	5,428 >LR	161 NM	77-120	D2 M1 M3
Dibromochloromethane	<3.333	833.3	842.2	100	76-120	D2
1,2-Dibromoethane	<3.367	833.3	837.7	101	77-120	D2
Chlorobenzene	<3.333	833.3	860.7	103	78-120	D2
1,1,1,2-Tetrachloroethane	<3.333	833.3	895.9	107	77-120	D2
Ethylbenzene	<3.333	833.3	914.4	110	78-120	D2
m,p-Xylenes	<5.318	1,667	1,788	107	77-120	D2
o-Xylene	<3.333	833.3	876.6	105	77-120	D2

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155522
MSS Lab ID:	215107-009	Sampled:	09/22/09
Matrix:	Water	Received:	09/22/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	33.33		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Styrene	<3.333	833.3	866.5	104	77-120	D2
Bromoform	<6.667	833.3	745.8	89	74-121	D2
Isopropylbenzene	<3.343	833.3	813.9	98	71-120	D2
1,1,2,2-Tetrachloroethane	<4.012	833.3	867.0	104	73-120	D2
1,2,3-Trichloropropane	<3.481	833.3	819.8	98	72-120	D2
Propylbenzene	<3.617	833.3	924.3	111	76-120	D2
Bromobenzene	<3.333	833.3	850.6	102	75-120	D2
1,3,5-Trimethylbenzene	<3.333	833.3	909.9	109	77-120	D2
2-Chlorotoluene	<3.333	833.3	893.8	107	76-120	D2
4-Chlorotoluene	<3.333	833.3	844.1	101	78-120	D2
tert-Butylbenzene	<3.333	833.3	916.3	110	76-120	D2
1,2,4-Trimethylbenzene	<3.333	833.3	870.0	104	77-120	D2
sec-Butylbenzene	<3.493	833.3	947.2	114	80-120	D2
para-Isopropyl Toluene	<3.900	833.3	890.4	107	76-120	D2
1,3-Dichlorobenzene	<3.869	833.3	845.9	102	75-120	D2
1,4-Dichlorobenzene	<3.825	833.3	830.4	100	77-120	D2
n-Butylbenzene	4.743	833.3	942.3 b	113	76-120	D2
1,2-Dichlorobenzene	<3.333	833.3	821.4	99	76-120	D2
1,2-Dibromo-3-Chloropropane	<13.33	833.3	785.6	94	65-120	D2
1,2,4-Trichlorobenzene	<4.531	833.3	764.5	92	73-121	D2
Hexachlorobutadiene	<13.33	833.3	907.9 b	109	73-123	D2
Naphthalene	<13.33	833.3	799.7	96	62-121	D2
1,2,3-Trichlorobenzene	<4.867	833.3	788.8	95	66-123	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	106	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155522
MSS Lab ID:	215107-009	Sampled:	09/22/09
Matrix:	Water	Received:	09/22/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	33.33		

Type: MSD Lab ID: QC514603

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	833.3	839.7 b	101	56-140	10	24	D2 V3
Chloromethane	833.3	682.1	82	46-142	5	24	D2
Vinyl Chloride	833.3	748.7	90	49-136	9	24	D2
Bromomethane	833.3	625.3 b	75	42-154	12	24	D2
Chloroethane	833.3	726.2	87	51-133	11	25	D2
Trichlorofluoromethane	833.3	834.0	100	63-135	10	20	D2
Iodomethane	833.3	636.7 b	76	60-140	7	30	D2
Acetone	833.3	528.5 b	63	48-130	5	41	D2
1,1-Dichloroethene	833.3	1,120	103	68-133	5	20	D2
Methylene Chloride	833.3	770.5	92	71-120	3	20	D2
Carbon Disulfide	833.3	738.8	89	56-120	8	20	D2
MTBE	833.3	757.9	91	58-120	3	21	D2
trans-1,2-Dichloroethene	833.3	845.2	101	80-120	6	24	D2
Vinyl Acetate	833.3	1,000 b	120	63-124	6	24	D2 R2
1,1-Dichloroethane	833.3	851.9	98	77-120	7	20	D2
2-Butanone	833.3	603.9	72	57-120	10	32	D2
cis-1,2-Dichloroethene	833.3	942.2	96	75-120	6	20	D2
2,2-Dichloropropane	833.3	1,074 b	129 *	72-128	7	24	D2 M1 V3
Chloroform	833.3	814.0	97	78-120	5	20	D2
Bromochloromethane	833.3	794.9	95	78-120	6	20	D2
1,1,1-Trichloroethane	833.3	1,148	111	78-120	6	20	D2
1,1-Dichloropropene	833.3	901.7 b	108	75-120	9	21	D2 V3
Carbon Tetrachloride	833.3	931.3 b	112	80-120	12	21	D2 V3
1,2-Dichloroethane	833.3	817.1	98	74-120	6	20	D2
Benzene	833.3	816.0	98	77-120	6	20	D2
Trichloroethene	833.3	4,677 >LR	83 NM	78-122	NC	20	D2 M3
1,2-Dichloropropane	833.3	783.3	94	76-120	9	20	D2
Bromodichloromethane	833.3	827.2	99	78-120	5	20	D2
Dibromomethane	833.3	801.6	96	77-120	5	20	D2
4-Methyl-2-Pentanone	833.3	716.3	86	65-120	6	22	D2
cis-1,3-Dichloropropene	833.3	826.2	99	76-120	7	20	D2
Toluene	833.3	789.4	95	73-120	6	20	D2
trans-1,3-Dichloropropene	833.3	735.3	88	72-120	5	20	D2
1,1,2-Trichloroethane	833.3	803.6	96	76-120	5	20	D2
2-Hexanone	833.3	677.5	81	57-121	6	25	D2
1,3-Dichloropropane	833.3	811.0	97	75-120	5	20	D2
Tetrachloroethene	833.3	4,990 >LR	108 NM	77-120	NC	20	D2 M3
Dibromochloromethane	833.3	803.7	96	76-120	5	20	D2
1,2-Dibromoethane	833.3	779.0	93	77-120	7	20	D2
Chlorobenzene	833.3	798.9	96	78-120	7	20	D2
1,1,1,2-Tetrachloroethane	833.3	836.4	100	77-120	7	20	D2
Ethylbenzene	833.3	852.4	102	78-120	7	26	D2
m,p-Xylenes	1,667	1,663	100	77-120	7	20	D2
o-Xylene	833.3	817.3	98	77-120	7	20	D2

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	155522
MSS Lab ID:	215107-009	Sampled:	09/22/09
Matrix:	Water	Received:	09/22/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	33.33		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Styrene	833.3	810.3	97	77-120	7	20	D2
Bromoform	833.3	708.5	85	74-121	5	21	D2
Isopropylbenzene	833.3	760.7	91	71-120	7	20	D2
1,1,2,2-Tetrachloroethane	833.3	812.6	98	73-120	6	20	D2
1,2,3-Trichloropropane	833.3	770.4	92	72-120	6	20	D2
Propylbenzene	833.3	859.5	103	76-120	7	20	D2
Bromobenzene	833.3	806.2	97	75-120	5	20	D2
1,3,5-Trimethylbenzene	833.3	852.6	102	77-120	6	20	D2
2-Chlorotoluene	833.3	845.1	101	76-120	6	20	D2
4-Chlorotoluene	833.3	801.9	96	78-120	5	20	D2
tert-Butylbenzene	833.3	876.0	105	76-120	4	21	D2
1,2,4-Trimethylbenzene	833.3	832.6	100	77-120	4	20	D2
sec-Butylbenzene	833.3	892.3	107	80-120	6	21	D2
para-Isopropyl Toluene	833.3	829.8	100	76-120	7	20	D2
1,3-Dichlorobenzene	833.3	794.6	95	75-120	6	20	D2
1,4-Dichlorobenzene	833.3	790.2	95	77-120	5	23	D2
n-Butylbenzene	833.3	904.5 b	108	76-120	4	21	D2
1,2-Dichlorobenzene	833.3	797.9	96	76-120	3	20	D2
1,2-Dibromo-3-Chloropropane	833.3	745.0	89	65-120	5	22	D2
1,2,4-Trichlorobenzene	833.3	737.3	88	73-121	4	20	D2
Hexachlorobutadiene	833.3	901.8 b	108	73-123	1	25	D2
Naphthalene	833.3	788.5	95	62-121	1	32	D2
1,2,3-Trichlorobenzene	833.3	781.9	94	66-123	1	29	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514686	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215071	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514686	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469393599006 File : giu06 Time : 30-SEP-2009 10:27

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	12433	16.29	
75	30% - 60% of mass 95	33789	44.28	
95		76312	100.00	
96	5% - 9% of mass 95	4831	6.33	
173	< 2% of mass 174	130	0.20	
174	> 50% and < 100% of mass 95	65213	85.46	
175	5% - 9% of mass 174	4663	7.15	
176	> 95% and < 101% of mass 174	63722	97.71	
177	5% - 9% of mass 176	4189	6.57	

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469393599023 File : giu23 Time : 30-SEP-2009 19:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13571	16.48	
75	30% - 60% of mass 95	37362	45.38	
95		82328	100.00	
96	5% - 9% of mass 95	5444	6.61	
173	< 2% of mass 174	243	0.35	
174	> 50% and < 100% of mass 95	70056	85.09	
175	5% - 9% of mass 174	4780	6.82	
176	> 95% and < 101% of mass 174	67722	96.67	
177	5% - 9% of mass 176	4535	6.70	

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469395137011 File : gj111 Time : 01-OCT-2009 15:05

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	14999	17.07	
75	30% - 60% of mass 95	40045	45.58	
95		87861	100.00	
96	5% - 9% of mass 95	5964	6.79	
173	< 2% of mass 174	413	0.57	
174	> 50% and < 100% of mass 95	72752	82.80	
175	5% - 9% of mass 174	5124	7.04	
176	> 95% and < 101% of mass 174	69909	96.09	
177	5% - 9% of mass 176	5159	7.38	

TEW: 10/01/09 DNT: 10/02/09 LW: 10/02/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499361940008 File : ji808 Time : 09-SEP-2009 00:19

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	42221	27.77	
75	30% - 60% of mass 95	74037	48.70	
95		152042	100.00	
96	5% - 9% of mass 95	10062	6.62	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	113397	74.58	
175	5% - 9% of mass 174	8359	7.37	
176	> 95% and < 101% of mass 174	108642	95.81	
177	5% - 9% of mass 176	7287	6.71	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499363592006 File : ji906 Time : 09-SEP-2009 14:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37064	27.53	
75	30% - 60% of mass 95	66016	49.03	
95		134640	100.00	
96	5% - 9% of mass 95	8828	6.56	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	99874	74.18	
175	5% - 9% of mass 174	7262	7.27	
176	> 95% and < 101% of mass 174	94946	95.07	
177	5% - 9% of mass 176	6387	6.73	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499395015002 File : jj102 Time : 01-OCT-2009 08:24

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	84101	28.79	
75	30% - 60% of mass 95	151768	51.95	
95		292138	100.00	
96	5% - 9% of mass 95	18985	6.50	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	218901	74.93	
175	5% - 9% of mass 174	16353	7.47	
176	> 95% and < 101% of mass 174	210901	96.35	
177	5% - 9% of mass 176	14318	6.79	

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839395033004 File : kj104 Time : 01-OCT-2009 09:10

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9450	17.39	
75	30% - 60% of mass 95	26987	49.65	
95		54352	100.00	
96	5% - 9% of mass 95	3449	6.35	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	42792	78.73	
175	5% - 9% of mass 174	3177	7.42	
176	> 95% and < 101% of mass 174	41725	97.51	
177	5% - 9% of mass 176	2710	6.49	

Analyst: BO Date: 10/01/09 Reviewer: LW Date: 10/02/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 MSVOA Water: EPA 8260B

Inst : MSVOA07 Name : 826GOX7
Calnum : 469393599002 Date : 30-SEP-2009 11:10 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	giu08	469393599008	.25/.5PPB	30-SEP-2009 11:10	S13034 (200000X), S13036 (200000X), S13035 (200000X), S13033 (100000X), S12921 (5000X)
L2	giu09	469393599009	0.5/1PPB	30-SEP-2009 11:40	S13034 (100000X), S13036 (100000X), S13035 (100000X), S13033 (50000X), S12921 (5000X)
L3	giu10	469393599010	2PPB	30-SEP-2009 12:11	S13034 (25000X), S13036 (25000X), S13035 (50000X), S13033 (25000X), S12921 (5000X)
L4	giu11	469393599011	5PPB	30-SEP-2009 12:41	S13034 (10000X), S13036 (10000X), S13035 (20000X), S13033 (10000X), S12921 (5000X)
L5	giu12	469393599012	10PPB	30-SEP-2009 13:12	S13034 (5000X), S13036 (5000X), S13035 (10000X), S13033 (5000X), S12921 (5000X)
L6	giu13	469393599013	20PPB	30-SEP-2009 13:43	S12998 (25000X), S13032 (25000X), S12565 (50000X), S12929 (25000X), S12921 (5000X)
L7	giu14	469393599014	50PPB	30-SEP-2009 14:13	S12998 (10000X), S13032 (10000X), S12565 (20000X), S12929 (10000X), S12921 (5000X)
L8	giu16	469393599016	100PPB	30-SEP-2009 15:15	S12998 (5000X), S13032 (5000X), S12565 (10000X), S12929 (5000X), S12921 (5000X)
L9	giu20	469393599020	75PPB	30-SEP-2009 17:48	S12998 (6667X), S13032 (6667X), S12565 (13330X), S12929 (6667X), S12921 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.3465	0.3588	0.3938	0.4177	0.3936	0.3987	0.4074	0.3881	AVRG		2.57675		0.3881	6	15	0.05	0.99	
Chloromethane		0.4519	0.4803	0.4783	0.4213	0.4246	0.4066	0.3887	0.3867	AVRG		2.32658		0.4298	9	15	0.10	0.99	
Vinyl Chloride	0.3320	0.3709	0.4171	0.4434	0.4108	0.4192	0.4049	0.3995	0.3797	AVRG		2.51574		0.3975	8	15	0.05	0.99	
Bromomethane		0.2792	0.2775	0.2629	0.2285	0.2349	0.2326	0.2368	0.2180	AVRG		4.06008		0.2463	10	15	0.05	0.99	
Chloroethane		0.3055	0.2736	0.2640	0.2343	0.2440	0.2330	0.2277	0.3160	AVRG		3.81270		0.2623	13	15	0.05	0.99	
Trichlorofluoromethane		0.4891	0.5260	0.5747	0.5771	0.5637	0.5603	0.5648	0.5412	AVRG		1.81940		0.5496	5	15	0.05	0.99	
Acetone				0.1641	0.1518	0.1219	0.1398	0.1268	0.1165	AVRG		7.30832		0.1368	14	15	0.05	0.99	
1,1-Dichloroethene		0.3209	0.3529	0.3394	0.3172	0.3288	0.2982	0.3175	0.3181	AVRG		3.08521		0.3241	5	15	0.05	0.99	
Iodomethane				0.5303	0.4675	0.4972	0.5019	0.5021	0.4906	AVRG		2.00691		0.4983	4	15	0.05	0.99	
Methylene Chloride		0.5259	0.4778	0.4531	0.4324	0.4130	0.3999	0.3951	0.3949	AVRG		2.29098		0.4365	11	15	0.05	0.99	
Carbon Disulfide		1.2264	1.3985	1.4190	1.2704	1.3482	1.2367	1.2947	1.3007	AVRG		0.76230		1.3118	5	15	0.05	0.99	
MTBE		1.3509	1.3731	1.3666	1.2135	1.2890	1.3213	1.2570	1.2197	AVRG		0.76989		1.2989	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4276	0.4377	0.4314	0.3751	0.3965	0.3698	0.3777	0.3793	AVRG		2.50380		0.3994	7	15	0.05	0.99	
Vinyl Acetate			0.8075	0.8569	0.7566	0.8237	0.7987	0.6851	0.8331	AVRG		1.25867		0.7945	7	15	0.05	0.99	
1,1-Dichloroethane		0.7137	0.7818	0.7772	0.6702	0.7020	0.6728	0.6705	0.6769	AVRG		1.41216		0.7081	7	15	0.10	0.99	
2-Butanone				0.2147	0.2081	0.1864	0.2131	0.1860	0.1745	AVRG		5.07247		0.1971	9	15	0.05	0.99	
2,2-Dichloropropane		0.5306	0.5811	0.5912	0.5235	0.5434	0.4861	0.5038	0.5593	AVRG		1.85230		0.5399	7	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4767	0.4998	0.4964	0.4290	0.4433	0.4345	0.4323	0.4348	AVRG		2.19371		0.4558	7	15	0.05	0.99	
Chloroform		0.8178	0.7499	0.7307	0.6259	0.6562	0.6318	0.6253	0.6297	AVRG		1.46326		0.6834	11	15	0.05	0.99	
Bromochloromethane		0.2076	0.2207	0.2227	0.1997	0.2121	0.2125	0.2094	0.2068	AVRG		4.72934		0.2114	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.5064	0.5835	0.5717	0.5184	0.5495	0.4796	0.5202	0.5223	AVRG		1.88165		0.5314	7	15	0.05	0.99	
1,1-Dichloropropene		0.3004	0.3666	0.3688	0.3410	0.3571	0.3059	0.3389	0.3400	AVRG		2.94257		0.3398	8	15	0.05	0.99	
Carbon Tetrachloride		0.2503	0.3007	0.3082	0.2890	0.3032	0.2514	0.2910	0.2868	AVRG		3.50798		0.2851	8	15	0.05	0.99	
1,2-Dichloroethane		0.3246	0.3492	0.3445	0.3100	0.3254	0.3251	0.3158	0.3096	AVRG		3.07204		0.3255	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.1955	1.2722	1.2435	1.1269	1.1431	1.0779	1.0728	1.0770	AVRG		0.86872		1.1511	7	15	0.05	0.99	
Trichloroethene		0.2781	0.2913	0.2864	0.2556	0.2683	0.2475	0.2637	0.2539	AVRG		3.72991		0.2681	6	15	0.05	0.99	
1,2-Dichloropropane		0.2920	0.3231	0.3278	0.2864	0.3043	0.2930	0.2920	0.2896	AVRG		3.32216		0.3010	5	15	0.05	0.99	
Bromodichloromethane		0.3403	0.3421	0.3469	0.3066	0.3242	0.3232	0.3239	0.3178	AVRG		3.04758		0.3281	4	15	0.05	0.99	
Dibromomethane		0.1627	0.1638	0.1651	0.1471	0.1573	0.1612	0.1555	0.1504	AVRG		6.33371		0.1579	4	15	0.05	0.99	
4-Methyl-2-Pentanone				0.2664	0.2394	0.2607	0.2919	0.2632	0.2395	AVRG		3.84360		0.2602	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4626	0.4691	0.4698	0.4237	0.4509	0.4463	0.4384	0.4405	AVRG		2.22138		0.4502	4	15	0.05	0.99	
Toluene		0.7868	0.8483	0.8390	0.9589	0.7727	0.7097	0.7310	0.7324	AVRG		1.25417		0.7973	10	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4286	0.4618	0.4615	0.4212	0.4424	0.4467	0.4367	0.4336	AVRG		2.26463		0.4416	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1393	0.1450	0.1423	0.1277	0.1372	0.1395	0.1350	0.1305	AVRG		7.29501		0.1371	4	15	0.05	0.99	
2-Hexanone				0.2120	0.1886	0.1929	0.2183	0.1961	0.1778	AVRG		5.06081		0.1976	8	15	0.05	0.99	
1,3-Dichloropropane		0.4684	0.4786	0.4791	0.4343	0.4611	0.4635	0.4479	0.4360	AVRG		2.18044		0.4586	4	15	0.05	0.99	
Tetrachloroethene		0.2668	0.3234	0.3253	0.2976	0.3070	0.2552	0.2987	0.2934	AVRG		3.37916		0.2959	8	15	0.05	0.99	
Dibromochloromethane		0.2489	0.2612	0.2618	0.2403	0.2603	0.2701	0.2697	0.2594	AVRG		3.86159		0.2590	4	15	0.05	0.99	
1,2-Dibromoethane		0.2573	0.2765	0.2670	0.2391	0.2604	0.2700	0.2613	0.2482	AVRG		3.84639		0.2600	5	15	0.05	0.99	
Chlorobenzene		0.8789	0.9513	0.9329	0.8095	0.8589	0.8162	0.8191	0.8172	AVRG		1.16210		0.8605	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2692	0.2946	0.2937	0.2643	0.2797	0.2748	0.2786	0.2740	AVRG		3.58918		0.2786	4	15	0.05	0.99	
Ethylbenzene		1.4634	1.5794	1.5510	1.4652	1.4397	1.2706	1.3449	1.3573	AVRG		0.69738		1.4339	7	15	0.05	0.99	
m,p-Xylenes	0.5403	0.5592	0.6410	0.6288	0.6202	0.5848	0.5231	0.5501	0.5553	AVRG		1.72989		0.5781	7	15	0.05	0.99	
o-Xylene		0.5654	0.6144	0.6186	0.5871	0.5741	0.5333	0.5484	0.5496	AVRG		1.74253		0.5739	5	15	0.05	0.99	
Styrene		0.9546	1.0386	1.0499	0.9258	0.9871	0.9491	0.9571	0.9536	AVRG		1.02357		0.9770	5	15	0.05	0.99	
Bromoform		0.1577	0.1831	0.1777	0.1602	0.1795	0.1969	0.1960	0.1802	AVRG		5.58925		0.1789	8	15	0.10	0.99	
Isopropylbenzene		2.3289	2.6211	2.6264	2.3814	2.4588	2.0388	2.3224	2.3324	AVRG		0.41862		2.3888	8	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6435	0.6608	0.6069	0.5361	0.5868	0.6071	0.5599	0.5492	AVRG		1.68409		0.5938	7	15	0.30	0.99	
1,2,3-Trichloropropane		0.6179	0.6445	0.5911	0.5130	0.5682	0.5821	0.5420	0.5163	AVRG		1.74857		0.5719	8	15	0.05	0.99	
Propylbenzene		2.8823	3.1150	3.1408	2.8675	2.9304	2.4150	2.7087	2.7637	AVRG		0.35052		2.8529	8	15	0.05	0.99	
Bromobenzene		0.6870	0.7179	0.7130	0.6276	0.6617	0.6415	0.6530	0.6446	AVRG		1.49638		0.6683	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9861	2.2996	2.2618	2.0657	2.1027	1.8113	1.9858	2.0028	AVRG		0.48438		2.0645	8	15	0.05	0.99	
2-Chlorotoluene		2.1601	2.1987	2.1366	1.8784	1.9716	1.7702	1.8494	1.8745	AVRG		0.50507		1.9799	8	15	0.05	0.99	
4-Chlorotoluene		2.0398	2.0094	2.0161	1.7717	1.8557	1.7016	1.7621	1.7797	AVRG		0.53562		1.8670	7	15	0.05	0.99	
tert-Butylbenzene		1.7000	1.9298	1.9036	1.7349	1.8034	1.4646	1.7049	1.7009	AVRG		0.57380		1.7428	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1478	2.3679	2.3180	2.2234	2.1500	1.9102	2.0386	2.0526	AVRG		0.46489		2.1510	7	15	0.05	0.99	
sec-Butylbenzene		2.3119	2.6939	2.7139	2.5155	2.5954	2.0395	2.4392	2.4542	AVRG		0.40479		2.4704	9	15	0.05	0.99	
para-Isopropyl Toluene		2.1581	2.4001	2.3931	2.1997	2.2676	1.8484	2.1597	2.1683	AVRG		0.45468		2.1994	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.2753	1.3491	1.3431	1.1776	1.2368	1.1596	1.2027	1.1973	AVRG		0.80471		1.2427	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3588	1.4005	1.3741	1.2182	1.2715	1.2081	1.2420	1.2313	AVRG		0.77636		1.2881	6	15	0.05	0.99	
n-Butylbenzene		1.7919	2.0581	2.0570	1.9181	1.9888	1.5955	1.8810	1.9165	AVRG		0.52607		1.9009	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.2209	1.2680	1.2726	1.1189	1.1777	1.1382	1.1592	1.1401	AVRG		0.84250		1.1869	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1462	0.1171	0.0954	0.1059	0.1158	0.1076	0.0967	AVRG		8.92114		0.1121	15	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8783	0.9294	0.9188	0.8370	0.8824	0.8328	0.8974	0.8692	AVRG		1.13551		0.8807	4	15	0.05	0.99	
Hexachlorobutadiene		0.2978	0.3524	0.3565	0.3350	0.3491	0.2752	0.3434	0.3508	AVRG		3.00734		0.3325	9	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.4957	1.7246	1.6183	1.4943	1.6937	1.8932	1.8767	1.7101	AVRG		0.59230		1.6883	9	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7635	0.7800	0.8041	0.7152	0.7638	0.7487	0.7867	0.7409	AVRG		1.31085		0.7629	4	15	0.05	0.99	
Dibromofluoromethane		0.4070	0.4054	0.4085	0.4084	0.4068	0.4073	0.4078	0.4123	AVRG		2.45133		0.4079	0	15	0.05	0.99	
1,2-Dichloroethane-d4		0.3024	0.3126	0.3118	0.3060	0.3104	0.3116	0.3049	0.3011	AVRG		3.25099		0.3076	1	15	0.05	0.99	
Toluene-d8		1.2913	1.2939	1.2941	1.2950	1.2955	1.2890	1.2924	1.2960	AVRG		0.77316		1.2934	0	15	0.05	0.99	
Bromofluorobenzene		0.8706	0.8806	0.8680	0.8741	0.8760	0.8648	0.8678	0.8717	AVRG		1.14719		0.8717	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-11	2.000	-8	5.000	1	10.00	8	20.00	1	50.00	3	100.0	5	75.00	0
Chloromethane			1.000	5	2.000	12	5.000	11	10.00	-2	20.00	-1	50.00	-5	100.0	-10	75.00	-10
Vinyl Chloride	0.500	-16	1.000	-7	2.000	5	5.000	12	10.00	3	20.00	5	50.00	2	100.0	1	75.00	-4
Bromomethane			1.000	13	2.000	13	5.000	7	10.00	-7	20.00	-5	50.00	-6	100.0	-4	75.00	-12
Chloroethane			1.000	16	2.000	4	5.000	1	10.00	-11	20.00	-7	50.00	-11	100.0	-13	75.00	20
Trichlorofluoromethane			1.000	-11	2.000	-4	5.000	5	10.00	5	20.00	3	50.00	2	100.0	3	75.00	-2
Acetone							5.000	20	10.00	11	20.00	-11	50.00	2	100.0	-7	75.00	-15
1,1-Dichloroethene			0.500	-1	2.000	9	5.000	5	10.00	-2	20.00	1	50.00	-8	100.0	-2	75.00	-2
Iodomethane							5.000	6	10.00	-6	20.00	0	50.00	1	100.0	1	75.00	-2
Methylene Chloride			0.500	20	2.000	9	5.000	4	10.00	-1	20.00	-5	50.00	-8	100.0	-9	75.00	-10
Carbon Disulfide			0.500	-7	2.000	7	5.000	8	10.00	-3	20.00	3	50.00	-6	100.0	-1	75.00	-1
MTBE			0.500	4	2.000	6	5.000	5	10.00	-7	20.00	-1	50.00	2	100.0	-3	75.00	-6
trans-1,2-Dichloroethene			0.500	7	2.000	10	5.000	8	10.00	-6	20.00	-1	50.00	-7	100.0	-5	75.00	-5
Vinyl Acetate					2.000	2	5.000	8	10.00	-5	20.00	4	50.00	1	100.0	-14	75.00	5
1,1-Dichloroethane			0.500	1	2.000	10	5.000	10	10.00	-5	20.00	-1	50.00	-5	100.0	-5	75.00	-4
2-Butanone							5.000	9	10.00	6	20.00	-5	50.00	8	100.0	-6	75.00	-11
2,2-Dichloropropane			0.500	-2	2.000	8	5.000	10	10.00	-3	20.00	1	50.00	-10	100.0	-7	75.00	4
cis-1,2-Dichloroethene			0.500	5	2.000	10	5.000	9	10.00	-6	20.00	-3	50.00	-5	100.0	-5	75.00	-5
Chloroform			0.500	20	2.000	10	5.000	7	10.00	-8	20.00	-4	50.00	-8	100.0	-9	75.00	-8
Bromochloromethane			0.500	-2	2.000	4	5.000	5	10.00	-6	20.00	0	50.00	0	100.0	-1	75.00	-2
1,1,1-Trichloroethane			0.500	-5	2.000	10	5.000	8	10.00	-2	20.00	3	50.00	-10	100.0	-2	75.00	-2
1,1-Dichloropropene			0.500	-12	2.000	8	5.000	9	10.00	0	20.00	5	50.00	-10	100.0	0	75.00	0
Carbon Tetrachloride			0.500	-12	2.000	5	5.000	8	10.00	1	20.00	6	50.00	-12	100.0	2	75.00	1
1,2-Dichloroethane			0.500	0	2.000	7	5.000	6	10.00	-5	20.00	0	50.00	0	100.0	-3	75.00	-5
Benzene			0.500	4	2.000	11	5.000	8	10.00	-2	20.00	-1	50.00	-6	100.0	-7	75.00	-6
Trichloroethene			0.500	4	2.000	9	5.000	7	10.00	-5	20.00	0	50.00	-8	100.0	-2	75.00	-5
1,2-Dichloropropane			0.500	-3	2.000	7	5.000	9	10.00	-5	20.00	1	50.00	-3	100.0	-3	75.00	-4
Bromodichloromethane			0.500	4	2.000	4	5.000	6	10.00	-7	20.00	-1	50.00	-1	100.0	-1	75.00	-3
Dibromomethane			0.500	3	2.000	4	5.000	5	10.00	-7	20.00	0	50.00	2	100.0	-1	75.00	-5
4-Methyl-2-Pentanone							5.000	2	10.00	-8	20.00	0	50.00	12	100.0	1	75.00	-8
cis-1,3-Dichloropropene			0.500	3	2.000	4	5.000	4	10.00	-6	20.00	0	50.00	-1	100.0	-3	75.00	-2
Toluene			0.500	-1	2.000	6	5.000	5	10.00	20	20.00	-3	50.00	-11	100.0	-8	75.00	-8
trans-1,3-Dichloropropene			0.500	-3	2.000	5	5.000	5	10.00	-5	20.00	0	50.00	1	100.0	-1	75.00	-2
1,1,2-Trichloroethane			0.500	2	2.000	6	5.000	4	10.00	-7	20.00	0	50.00	2	100.0	-2	75.00	-5
2-Hexanone							5.000	7	10.00	-5	20.00	-2	50.00	10	100.0	-1	75.00	-10
1,3-Dichloropropane			0.500	2	2.000	4	5.000	4	10.00	-5	20.00	1	50.00	1	100.0	-2	75.00	-5
Tetrachloroethene			0.500	-10	2.000	9	5.000	10	10.00	1	20.00	4	50.00	-14	100.0	1	75.00	-1
Dibromochloromethane			0.500	-4	2.000	1	5.000	1	10.00	-7	20.00	1	50.00	4	100.0	4	75.00	0
1,2-Dibromoethane			0.500	-1	2.000	6	5.000	3	10.00	-8	20.00	0	50.00	4	100.0	0	75.00	-5
Chlorobenzene			0.500	2	2.000	11	5.000	8	10.00	-6	20.00	0	50.00	-5	100.0	-5	75.00	-5
1,1,1,2-Tetrachloroethane			0.500	-3	2.000	6	5.000	5	10.00	-5	20.00	0	50.00	-1	100.0	0	75.00	-2
Ethylbenzene			0.500	2	2.000	10	5.000	8	10.00	2	20.00	0	50.00	-11	100.0	-6	75.00	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-7	1.000	-3	4.000	11	10.00	9	20.00	7	40.00	1	100.0	-10	200.0	-5	150.0	-4
o-Xylene			0.500	-1	2.000	7	5.000	8	10.00	2	20.00	0	50.00	-7	100.0	-4	75.00	-4
Styrene			0.500	-2	2.000	6	5.000	7	10.00	-5	20.00	1	50.00	-3	100.0	-2	75.00	-2
Bromoform			0.500	-12	2.000	2	5.000	-1	10.00	-10	20.00	0	50.00	10	100.0	10	75.00	1
Isopropylbenzene			0.500	-3	2.000	10	5.000	10	10.00	0	20.00	3	50.00	-15	100.0	-3	75.00	-2
1,1,2,2-Tetrachloroethane			0.500	8	2.000	11	5.000	2	10.00	-10	20.00	-1	50.00	2	100.0	-6	75.00	-8
1,2,3-Trichloropropane			0.500	8	2.000	13	5.000	3	10.00	-10	20.00	-1	50.00	2	100.0	-5	75.00	-10
Propylbenzene			0.500	1	2.000	9	5.000	10	10.00	1	20.00	3	50.00	-15	100.0	-5	75.00	-3
Bromobenzene			0.500	3	2.000	7	5.000	7	10.00	-6	20.00	-1	50.00	-4	100.0	-2	75.00	-4
1,3,5-Trimethylbenzene			0.500	-4	2.000	11	5.000	10	10.00	0	20.00	2	50.00	-12	100.0	-4	75.00	-3
2-Chlorotoluene			0.500	9	2.000	11	5.000	8	10.00	-5	20.00	0	50.00	-11	100.0	-7	75.00	-5
4-Chlorotoluene			0.500	9	2.000	8	5.000	8	10.00	-5	20.00	-1	50.00	-9	100.0	-6	75.00	-5
tert-Butylbenzene			0.500	-2	2.000	11	5.000	9	10.00	0	20.00	3	50.00	-16	100.0	-2	75.00	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	10	5.000	8	10.00	3	20.00	0	50.00	-11	100.0	-5	75.00	-5
sec-Butylbenzene			0.500	-6	2.000	9	5.000	10	10.00	2	20.00	5	50.00	-17	100.0	-1	75.00	-1
para-Isopropyl Toluene			0.500	-2	2.000	9	5.000	9	10.00	0	20.00	3	50.00	-16	100.0	-2	75.00	-1
1,3-Dichlorobenzene			0.500	3	2.000	9	5.000	8	10.00	-5	20.00	0	50.00	-7	100.0	-3	75.00	-4
1,4-Dichlorobenzene			0.500	5	2.000	9	5.000	7	10.00	-5	20.00	-1	50.00	-6	100.0	-4	75.00	-4
n-Butylbenzene			0.500	-6	2.000	8	5.000	8	10.00	1	20.00	5	50.00	-16	100.0	-1	75.00	1
1,2-Dichlorobenzene			0.500	3	2.000	7	5.000	7	10.00	-6	20.00	-1	50.00	-4	100.0	-2	75.00	-4
1,2-Dibromo-3-Chloropropane					2.000	**30**	5.000	4	10.00	-15	20.00	-6	50.00	3	100.0	-4	75.00	-14
1,2,4-Trichlorobenzene			0.500	0	2.000	6	5.000	4	10.00	-5	20.00	0	50.00	-5	100.0	2	75.00	-1
Hexachlorobutadiene			0.500	-10	2.000	6	5.000	7	10.00	1	20.00	5	50.00	-17	100.0	3	75.00	5
Naphthalene			0.500	-11	2.000	2	5.000	-4	10.00	-11	20.00	0	50.00	12	100.0	11	75.00	1
1,2,3-Trichlorobenzene			0.500	0	2.000	2	5.000	5	10.00	-6	20.00	0	50.00	-2	100.0	3	75.00	-3
Dibromofluoromethane			50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	1
1,2-Dichloroethane-d4			50.00	-2	50.00	2	50.00	1	50.00	-1	50.00	1	50.00	1	50.00	-1	50.00	-2
Toluene-d8			50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0
Bromofluorobenzene			50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 Name : 826GOX7
Calnum : 469393599002 Cal Date : 30-SEP-2009 Type : WATER

ICV 469393599025 (giu25 30-SEP-2009) stds: S12996 (10000X), S13055 (10000X), S12693 (10000X), S12925 (10000X), S12921 (5000X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.51	ug/L	10	25	
Chloromethane	25.00	24.63	ug/L	-1	25	
Vinyl Chloride	25.00	24.66	ug/L	-1	25	
Bromomethane	25.00	25.23	ug/L	1	25	
Chloroethane	25.00	24.55	ug/L	-2	25	
Trichlorofluoromethane	25.00	26.09	ug/L	4	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	25.34	ug/L	1	25	
Iodomethane	25.00	27.16	ug/L	9	25	
Methylene Chloride	25.00	24.75	ug/L	-1	25	
Carbon Disulfide	25.00	20.99	ug/L	-16	25	
MTBE	25.00	25.35	ug/L	1	25	
trans-1,2-Dichloroethene	25.00	26.21	ug/L	5	25	
Vinyl Acetate	25.00	26.14	ug/L	5	25	
1,1-Dichloroethane	25.00	25.76	ug/L	3	25	
2-Butanone	25.00	28.00	ug/L	12	25	
2,2-Dichloropropane	25.00	26.68	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	25.48	ug/L	2	25	
Chloroform	25.00	25.11	ug/L	0	25	
Bromochloromethane	25.00	26.53	ug/L	6	25	
1,1,1-Trichloroethane	25.00	26.19	ug/L	5	25	
1,1-Dichloropropene	25.00	27.10	ug/L	8	25	
Carbon Tetrachloride	25.00	26.72	ug/L	7	25	
1,2-Dichloroethane	25.00	26.79	ug/L	7	25	
Benzene	25.00	25.76	ug/L	3	25	
Trichloroethene	25.00	25.89	ug/L	4	25	
1,2-Dichloropropane	25.00	25.72	ug/L	3	25	
Bromodichloromethane	25.00	26.63	ug/L	7	25	
Dibromomethane	25.00	27.06	ug/L	8	25	
4-Methyl-2-Pentanone	25.00	27.46	ug/L	10	25	
cis-1,3-Dichloropropene	25.00	27.96	ug/L	12	25	
Toluene	25.00	25.10	ug/L	0	25	
trans-1,3-Dichloropropene	25.00	25.70	ug/L	3	25	
1,1,2-Trichloroethane	25.00	27.83	ug/L	11	25	
2-Hexanone	25.00	27.59	ug/L	10	25	
1,3-Dichloropropane	25.00	27.90	ug/L	12	25	
Tetrachloroethene	25.00	26.96	ug/L	8	25	
Dibromochloromethane	25.00	27.71	ug/L	11	25	
1,2-Dibromoethane	25.00	27.89	ug/L	12	25	
Chlorobenzene	25.00	26.08	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	26.58	ug/L	6	25	
Ethylbenzene	25.00	26.32	ug/L	5	25	
m,p-Xylenes	50.00	52.90	ug/L	6	25	
o-Xylene	25.00	26.28	ug/L	5	25	
Styrene	25.00	26.83	ug/L	7	25	
Bromoform	25.00	28.39	ug/L	14	25	
Isopropylbenzene	25.00	23.76	ug/L	-5	25	
1,1,2,2-Tetrachloroethane	25.00	28.40	ug/L	14	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	28.18	ug/L	13	25	
Propylbenzene	25.00	26.88	ug/L	8	25	
Bromobenzene	25.00	26.46	ug/L	6	25	
1,3,5-Trimethylbenzene	25.00	26.84	ug/L	7	25	
2-Chlorotoluene	25.00	26.40	ug/L	6	25	
4-Chlorotoluene	25.00	25.98	ug/L	4	25	
tert-Butylbenzene	25.00	27.34	ug/L	9	25	
1,2,4-Trimethylbenzene	25.00	26.50	ug/L	6	25	
sec-Butylbenzene	25.00	28.22	ug/L	13	25	
para-Isopropyl Toluene	25.00	26.66	ug/L	7	25	
1,3-Dichlorobenzene	25.00	26.24	ug/L	5	25	
1,4-Dichlorobenzene	25.00	26.29	ug/L	5	25	
n-Butylbenzene	25.00	28.82	ug/L	15	25	
1,2-Dichlorobenzene	25.00	26.60	ug/L	6	25	
1,2-Dibromo-3-Chloropropane	25.00	27.52	ug/L	10	25	
1,2,4-Trichlorobenzene	25.00	26.65	ug/L	7	25	
Hexachlorobutadiene	25.00	29.26	ug/L	17	25	
Naphthalene	25.00	30.45	ug/L	22	25	
1,2,3-Trichlorobenzene	25.00	28.11	ug/L	12	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 MSVOA Water: EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Date : 09-SEP-2009 02:42 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ji812	499361940012	.25/0.5PPB	09-SEP-2009 02:42	S12733 (2000000X), S12773 (2000000X), S12217 (2000000X), S12685 (1000000X), S12692 (2500X)
L2	ji813	499361940013	0.5/1PPB	09-SEP-2009 03:16	S12733 (1000000X), S12773 (1000000X), S12217 (1000000X), S12685 (500000X), S12692 (2500X)
L3	ji814	499361940014	2PPB	09-SEP-2009 03:51	S12733 (250000X), S12773 (250000X), S12217 (500000X), S12685 (250000X), S12692 (2500X)
L4	ji815	499361940015	5PPB	09-SEP-2009 04:25	S12733 (100000X), S12773 (100000X), S12217 (200000X), S12685 (100000X), S12692 (2500X)
L5	ji816	499361940016	10PPB	09-SEP-2009 04:59	S12733 (50000X), S12773 (50000X), S12217 (100000X), S12685 (50000X), S12692 (2500X)
L6	ji817	499361940017	20PPB	09-SEP-2009 05:34	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12685 (25000X), S12692 (2500X)
L7	ji818	499361940018	50PPB	09-SEP-2009 06:08	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12685 (10000X), S12692 (2500X)
L8	ji819	499361940019	75PPB	09-SEP-2009 06:42	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12685 (6667X), S12692 (2500X)
L9	ji820	499361940020	100PPB	09-SEP-2009 07:17	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12685 (5000X), S12692 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.6454	0.6785	0.6243	0.6055	0.7615	0.7349	0.6564	0.6711	AVRG		1.48764		0.6722	8	15	0.05	0.99	
Chloromethane		1.5093	1.4219	1.2231	1.2011	1.4382	1.3492	1.2959	1.3263	AVRG		0.74314		1.3456	8	15	0.10	0.99	
Vinyl Chloride	0.8871	0.9513	1.0019	0.9129	0.8872	1.1307	1.0595	0.9789	0.9942	AVRG		1.02231		0.9782	8	15	0.05	0.99	
Bromomethane		0.4981m	0.5747	0.4665	0.4524	0.5383	0.5160	0.4937	0.5160	AVRG		1.97254		0.5070	8	15	0.05	0.99	
Chloroethane		0.7052	0.6161	0.5678	0.4631	0.5966	0.5465	0.5283	0.5237	AVRG		1.75927		0.5684	13	15	0.05	0.99	
Trichlorofluoromethane		0.6799	0.7087	0.6587	0.6243	0.8054	0.7530	0.6843	0.6989	AVRG		1.42521		0.7017	8	15	0.05	0.99	
Acetone				0.3953	0.3583	0.2918	0.2818	0.2980	0.3206	AVRG		3.08358		0.3243	14	15	0.05	0.99	
1,1-Dichloroethene		0.3480	0.5008	0.4908	0.4341	0.5199	0.5101	0.4913	0.5048	AVRG		2.10536		0.4750	12	15	0.05	0.99	
Iodomethane			0.2633	0.3064	0.3898	0.5675	0.6161	0.6070	0.6432	QUAD	2.11604	1.65576	-0.00197	0.4848	0.999	15	0.05	0.99	
Methylene Chloride		0.7746	0.7235	0.7242	0.7005	0.7386	0.7000	0.6875	0.7221	AVRG		1.38623		0.7214	4	15	0.05	0.99	
Carbon Disulfide		1.8372	2.2159	2.1329	1.9816	2.3654	2.2686	2.1810	2.2537	AVRG		0.46414		2.1545	8	15	0.05	0.99	
MTBE		1.8427	1.7628	1.6487	1.6803	1.9370	1.8518	1.8190	1.8911	AVRG		0.55427		1.8042	6	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5034	0.6153	0.5270	0.5171	0.5979	0.5853	0.5588	0.5809	AVRG		1.78346		0.5607	7	15	0.05	0.99	
Vinyl Acetate					1.2081	2.0056	2.0275	1.0372	1.1031	AVRG		0.67737		1.4763	**34**	15	0.05	0.99	rsd
1,1-Dichloroethane		1.2585	1.3704	1.2751	1.2341	1.4267	1.3592	1.3247	1.3931	AVRG		0.75174		1.3302	5	15	0.10	0.99	
2-Butanone			0.5118	0.4767	0.4601	0.4448	0.4177	0.4074	0.4395	AVRG		2.21653		0.4512	8	15	0.05	0.99	
2,2-Dichloropropane		0.5896	0.6552	0.6206	0.5776	0.6710	0.6525	0.6117	0.6179	AVRG		1.60125		0.6245	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6149	0.6824	0.6297	0.6000	0.6898	0.6643	0.6468	0.6782	AVRG		1.53665		0.6508	5	15	0.05	0.99	
Chloroform		1.3337	1.1517	1.0418	0.9891	1.1244	1.0792	1.0424	1.0773	AVRG		0.90501		1.1050	10	15	0.05	0.99	
Bromochloromethane		0.2603	0.2901	0.2729	0.2739	0.3214	0.3138	0.3131	0.3272	AVRG		3.37184		0.2966	9	15	0.05	0.99	
1,1,1-Trichloroethane		0.5468	0.6897	0.6722	0.6381	0.7167	0.7218	0.6866	0.6753	AVRG		1.49613		0.6684	8	15	0.05	0.99	
1,1-Dichloropropene		0.4024	0.5019	0.4981	0.4596	0.5005	0.5064	0.4859	0.4620	AVRG		2.09601		0.4771	7	15	0.05	0.99	
Carbon Tetrachloride		0.2220	0.3158	0.3361	0.3060	0.3254	0.3423	0.3289	0.2976	AVRG		3.23351		0.3093	12	15	0.05	0.99	
1,2-Dichloroethane		0.5312	0.5433	0.5139	0.5129	0.5686	0.5494	0.5388	0.5407	AVRG		1.86102		0.5373	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.4940	1.5343	1.4619	1.3935	1.5659	1.4939	1.4331	1.4346	AVRG		0.67733		1.4764	4	15	0.05	0.99	
Trichloroethene		0.3135	0.3737	0.3691	0.3398	0.3618	0.3472	0.3736	0.3715	AVRG		2.80687		0.3563	6	15	0.05	0.99	
1,2-Dichloropropane		0.4959	0.5074	0.4688	0.4571	0.5081	0.4901	0.4861	0.4900	AVRG		2.04943		0.4879	4	15	0.05	0.99	
Bromodichloromethane		0.4761	0.5057	0.4681	0.4607	0.5259	0.5008	0.4944	0.5056	AVRG		2.03182		0.4922	4	15	0.05	0.99	
Dibromomethane		0.2213	0.2515	0.2235	0.2288	0.2652	0.2537	0.2501	0.2558	AVRG		4.10292		0.2437	7	15	0.05	0.99	
4-Methyl-2-Pentanone			0.5531	0.4822	0.4919	0.5910	0.5673	0.5606	0.5788	AVRG		1.83014		0.5464	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.6024	0.6368	0.5960	0.5872	0.6698	0.6323	0.6265	0.6374	AVRG		1.60370		0.6236	4	15	0.05	0.99	
Toluene		0.9856	1.0398	1.1786	1.1103	1.0205	1.0238	0.9738	0.9466	AVRG		0.96630		1.0349	7	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6631	0.6595	0.6418	0.6652	0.7426	0.7315	0.6991	0.7252	AVRG		1.44717		0.6910	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.2148	0.2207	0.2072	0.2073	0.2378	0.2333	0.2264	0.2322	AVRG		4.49555		0.2224	5	15	0.05	0.99	
2-Hexanone			0.5124	0.4799	0.4626	0.4969	0.4837	0.4727	0.4923	AVRG		2.05860		0.4858	3	15	0.05	0.99	
1,3-Dichloropropane		0.6815	0.7001	0.6488	0.6654	0.7489	0.7366	0.7191	0.7403	AVRG		1.41827		0.7051	5	15	0.05	0.99	
Tetrachloroethene		0.2828	0.3738	0.3636	0.3348	0.3459	0.3747	0.3611	0.3305	AVRG		2.89101		0.3459	9	15	0.05	0.99	
Dibromochloromethane		0.3539	0.3932	0.3659	0.3657	0.4283	0.4223	0.4121	0.4221	AVRG		2.52887		0.3954	8	15	0.05	0.99	
1,2-Dibromoethane		0.3220	0.3808	0.3609	0.3683	0.4241	0.4197	0.4033	0.4164	AVRG		2.58446		0.3869	9	15	0.05	0.99	
Chlorobenzene		1.0262	1.0857	0.9794	0.9673	1.0854	1.0727	1.0391	1.0212	AVRG		0.96653		1.0346	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3105	0.3559	0.3269	0.3232	0.3626	0.3676	0.3618	0.3585	AVRG		2.89133		0.3459	6	15	0.05	0.99	
Ethylbenzene		1.8521	2.0005	1.9213	1.8343	1.8776	1.9187	1.8107	1.6925	AVRG		0.53663		1.8635	5	15	0.05	0.99	
m,p-Xylenes	0.6689	0.6306	0.6920	0.6939	0.6668	0.6568	0.6752	0.6381	0.5904	AVRG		1.52215		0.6570	5	15	0.05	0.99	
o-Xylene		0.6433	0.6674	0.6713	0.6431	0.6613	0.6763	0.6410	0.6061	AVRG		1.53558		0.6512	4	15	0.05	0.99	
Styrene		1.1338	1.2490	1.1403	1.1414	1.2543	1.2449	1.1801	1.1663	AVRG		0.84121		1.1888	4	15	0.05	0.99	
Bromoform		0.2349	0.2643	0.2432	0.2578	0.2956	0.2949	0.2876	0.2929	AVRG		3.68474		0.2714	9	15	0.10	0.99	
Isopropylbenzene		3.1907	3.5284	3.3646	3.1636	3.2479	3.4516	3.2783	2.9069	AVRG		0.30614		3.2665	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.9599	0.9087	0.8036	0.8776	1.0791	1.0511	0.9155	0.9342	AVRG		1.06246		0.9412	10	15	0.30	0.99	
1,2,3-Trichloropropane		0.9685	0.9189	0.8487	0.8603	0.9818	0.9356	0.8992	0.8954	AVRG		1.09462		0.9136	5	15	0.05	0.99	
Propylbenzene		4.3101	4.6513	4.4056	4.1873	4.2283	4.4594	4.1717	3.7040	AVRG		0.23448		4.2647	7	15	0.05	0.99	
Bromobenzene		0.8081	0.8911	0.8564	0.8262	0.9559	0.9472	0.9017	0.8894	AVRG		1.13059		0.8845	6	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.7587	2.8838	2.7952	2.6280	2.7326	2.7825	2.6606	2.3692	AVRG		0.37019		2.7013	6	15	0.05	0.99	
2-Chlorotoluene		3.0925	3.1957	2.8991	2.7035	2.9645	2.9342	2.7835	2.5525	AVRG		0.34594		2.8907	7	15	0.05	0.99	
4-Chlorotoluene		2.9945	3.0070	2.6480	2.5894	2.7740	2.7643	2.6642	2.5013	AVRG		0.36459		2.7428	7	15	0.05	0.99	
tert-Butylbenzene		2.0959	2.2586	2.1555	2.0563	2.1153	2.2614	2.1637	1.8725	AVRG		0.47116		2.1224	6	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.8859	2.9236	2.9257	2.7624	2.8005	2.8327	2.6903	2.5030	AVRG		0.35836		2.7905	5	15	0.05	0.99	
sec-Butylbenzene		3.0771	3.5544	3.5133	3.2045	3.2342	3.5171	3.3395	2.9237	AVRG		0.30345		3.2955	7	15	0.05	0.99	
para-Isopropyl Toluene		2.5921	2.7653	2.6481	2.4663	2.5556	2.6975	2.5998	2.3142	AVRG		0.38762		2.5799	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.5381	1.6866	1.5352	1.4636	1.6278	1.6055	1.5759	1.5079	AVRG		0.63792		1.5676	5	15	0.05	0.99	
1,4-Dichlorobenzene		1.6780	1.7525	1.5542	1.5378	1.7267	1.6936	1.6183	1.5769	AVRG		0.60892		1.6423	5	15	0.05	0.99	
n-Butylbenzene		2.6320	2.7602	2.6553	2.4553	2.5151	2.6873	2.5971	2.2981	AVRG		0.38834		2.5751	6	15	0.05	0.99	
1,2-Dichlorobenzene		1.5331	1.5187	1.4267	1.4008	1.5876	1.5551	1.5086	1.4678	AVRG		0.66676		1.4998	4	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1652	0.1336	0.1517	0.1713	0.1697	0.1623	0.1661	AVRG		6.25058		0.1600	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.0034	0.8829	0.8119	0.8084	0.9164	0.9035	0.8982	0.8686	AVRG		1.12783		0.8867	7	15	0.05	0.99	
Hexachlorobutadiene			0.2878	0.2905	0.2638	0.2719	0.3130	0.3101	0.2634	AVRG		3.49917		0.2858	7	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.8799	1.8182	1.7200	1.7448	2.0430	2.0081	1.9450	1.9629	AVRG		0.52904		1.8902	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7229	0.7418	0.6910	0.6958	0.8029	0.7992	0.7930	0.7811	AVRG		1.32723		0.7534	6	15	0.05	0.99	
Dibromofluoromethane	0.5749	0.5652	0.5619	0.5609	0.5627	0.5613	0.5695	0.5654	0.5860	AVRG		1.76204		0.5675	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.4074	0.4080	0.4067	0.3908	0.4007	0.3964	0.3859	0.3847	0.3725	AVRG		2.53295		0.3948	3	15	0.05	0.99	
Toluene-d8	1.4162	1.4046	1.4140	1.4055	1.4132	1.4016	1.4212	1.4115	1.4191	AVRG		0.70827		1.4119	0	15	0.05	0.99	
Bromofluorobenzene	1.0908	1.1017	1.0830	1.0935	1.0812	1.0846	1.0831	1.0776	1.0653	AVRG		0.92205		1.0845	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-4	2.000	1	5.000	-7	10.00	-10	20.00	13	50.00	9	75.00	-2	100.0	0
Chloromethane			1.000	12	2.000	6	5.000	-9	10.00	-11	20.00	7	50.00	0	75.00	-4	100.0	-1
Vinyl Chloride	0.500	-9	1.000	-3	2.000	2	5.000	-7	10.00	-9	20.00	16	50.00	8	75.00	0	100.0	2
Bromomethane			1.000	-2	2.000	13	5.000	-8	10.00	-11	20.00	6	50.00	2	75.00	-3	100.0	2
Chloroethane			1.000	**24**	2.000	8	5.000	0	10.00	-19	20.00	5	50.00	-4	75.00	-7	100.0	-8
Trichlorofluoromethane			1.000	-3	2.000	1	5.000	-6	10.00	-11	20.00	15	50.00	7	75.00	-2	100.0	0
Acetone							5.000	**22**	10.00	10	20.00	-10	50.00	-13	75.00	-8	100.0	-1
1,1-Dichloroethene			0.500	**-27**	2.000	5	5.000	3	10.00	-9	20.00	9	50.00	7	75.00	3	100.0	6
Iodomethane					2.000	**49**	5.000	-7	10.00	-15	20.00	3	50.00	3	75.00	-2	100.0	0
Methylene Chloride			0.500	7	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	-3	75.00	-5	100.0	0
Carbon Disulfide			0.500	-15	2.000	3	5.000	-1	10.00	-8	20.00	10	50.00	5	75.00	1	100.0	5
MTBE			0.500	2	2.000	-2	5.000	-9	10.00	-7	20.00	7	50.00	3	75.00	1	100.0	5
trans-1,2-Dichloroethene			0.500	-10	2.000	10	5.000	-6	10.00	-8	20.00	7	50.00	4	75.00	0	100.0	4
Vinyl Acetate									10.00	-18	20.00	**36**	50.00	**37**	75.00	**-30**	100.0	**-25**
1,1-Dichloroethane			0.500	-5	2.000	3	5.000	-4	10.00	-7	20.00	7	50.00	2	75.00	0	100.0	5
2-Butanone					2.000	13	5.000	6	10.00	2	20.00	-1	50.00	-7	75.00	-10	100.0	-3
2,2-Dichloropropane			0.500	-6	2.000	5	5.000	-1	10.00	-8	20.00	7	50.00	4	75.00	-2	100.0	-1
cis-1,2-Dichloroethene			0.500	-6	2.000	5	5.000	-3	10.00	-8	20.00	6	50.00	2	75.00	-1	100.0	4
Chloroform			0.500	**21**	2.000	4	5.000	-6	10.00	-10	20.00	2	50.00	-2	75.00	-6	100.0	-3
Bromochloromethane			0.500	-12	2.000	-2	5.000	-8	10.00	-8	20.00	8	50.00	6	75.00	6	100.0	10
1,1,1-Trichloroethane			0.500	-18	2.000	3	5.000	1	10.00	-5	20.00	7	50.00	8	75.00	3	100.0	1
1,1-Dichloropropene			0.500	-16	2.000	5	5.000	4	10.00	-4	20.00	5	50.00	6	75.00	2	100.0	-3
Carbon Tetrachloride			0.500	**-28**	2.000	2	5.000	9	10.00	-1	20.00	5	50.00	11	75.00	6	100.0	-4
1,2-Dichloroethane			0.500	-1	2.000	1	5.000	-4	10.00	-5	20.00	6	50.00	2	75.00	0	100.0	1
Benzene			0.500	1	2.000	4	5.000	-1	10.00	-6	20.00	6	50.00	1	75.00	-3	100.0	-3
Trichloroethene			0.500	-12	2.000	5	5.000	4	10.00	-5	20.00	2	50.00	-3	75.00	5	100.0	4
1,2-Dichloropropane			0.500	2	2.000	4	5.000	-4	10.00	-6	20.00	4	50.00	0	75.00	0	100.0	0
Bromodichloromethane			0.500	-3	2.000	3	5.000	-5	10.00	-6	20.00	7	50.00	2	75.00	0	100.0	3
Dibromomethane			0.500	-9	2.000	3	5.000	-8	10.00	-6	20.00	9	50.00	4	75.00	3	100.0	5
4-Methyl-2-Pentanone					2.000	1	5.000	-12	10.00	-10	20.00	8	50.00	4	75.00	3	100.0	6
cis-1,3-Dichloropropene			0.500	-3	2.000	2	5.000	-4	10.00	-6	20.00	7	50.00	1	75.00	0	100.0	2
Toluene			0.500	-5	2.000	0	5.000	14	10.00	7	20.00	-1	50.00	-1	75.00	-6	100.0	-9
trans-1,3-Dichloropropene			0.500	-4	2.000	-5	5.000	-7	10.00	-4	20.00	7	50.00	6	75.00	1	100.0	5
1,1,2-Trichloroethane			0.500	-3	2.000	-1	5.000	-7	10.00	-7	20.00	7	50.00	5	75.00	2	100.0	4
2-Hexanone					2.000	5	5.000	-1	10.00	-5	20.00	2	50.00	0	75.00	-3	100.0	1
1,3-Dichloropropane			0.500	-3	2.000	-1	5.000	-8	10.00	-6	20.00	6	50.00	4	75.00	2	100.0	5
Tetrachloroethene			0.500	-18	2.000	8	5.000	5	10.00	-3	20.00	0	50.00	8	75.00	4	100.0	-4
Dibromochloromethane			0.500	-10	2.000	-1	5.000	-7	10.00	-8	20.00	8	50.00	7	75.00	4	100.0	7
1,2-Dibromoethane			0.500	-17	2.000	-2	5.000	-7	10.00	-5	20.00	10	50.00	8	75.00	4	100.0	8
Chlorobenzene			0.500	-1	2.000	5	5.000	-5	10.00	-7	20.00	5	50.00	4	75.00	0	100.0	-1
1,1,1,2-Tetrachloroethane			0.500	-10	2.000	3	5.000	-5	10.00	-7	20.00	5	50.00	6	75.00	5	100.0	4
Ethylbenzene			0.500	-1	2.000	7	5.000	3	10.00	-2	20.00	1	50.00	3	75.00	-3	100.0	-9

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	2	1.000	-4	4.000	5	10.00	6	20.00	1	40.00	0	100.0	3	150.0	-3	200.0	-10
o-Xylene			0.500	-1	2.000	2	5.000	3	10.00	-1	20.00	2	50.00	4	75.00	-2	100.0	-7
Styrene			0.500	-5	2.000	5	5.000	-4	10.00	-4	20.00	6	50.00	5	75.00	-1	100.0	-2
Bromoform			0.500	-13	2.000	-3	5.000	-10	10.00	-5	20.00	9	50.00	9	75.00	6	100.0	8
Isopropylbenzene			0.500	-2	2.000	8	5.000	3	10.00	-3	20.00	-1	50.00	6	75.00	0	100.0	-11
1,1,2,2-Tetrachloroethane			0.500	2	2.000	-3	5.000	-15	10.00	-7	20.00	15	50.00	12	75.00	-3	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	1	5.000	-7	10.00	-6	20.00	7	50.00	2	75.00	-2	100.0	-2
Propylbenzene			0.500	1	2.000	9	5.000	3	10.00	-2	20.00	-1	50.00	5	75.00	-2	100.0	-13
Bromobenzene			0.500	-9	2.000	1	5.000	-3	10.00	-7	20.00	8	50.00	7	75.00	2	100.0	1
1,3,5-Trimethylbenzene			0.500	2	2.000	7	5.000	3	10.00	-3	20.00	1	50.00	3	75.00	-2	100.0	-12
2-Chlorotoluene			0.500	7	2.000	11	5.000	0	10.00	-6	20.00	3	50.00	2	75.00	-4	100.0	-12
4-Chlorotoluene			0.500	9	2.000	10	5.000	-3	10.00	-6	20.00	1	50.00	1	75.00	-3	100.0	-9
tert-Butylbenzene			0.500	-1	2.000	6	5.000	2	10.00	-3	20.00	0	50.00	7	75.00	2	100.0	-12
1,2,4-Trimethylbenzene			0.500	3	2.000	5	5.000	5	10.00	-1	20.00	0	50.00	2	75.00	-4	100.0	-10
sec-Butylbenzene			0.500	-7	2.000	8	5.000	7	10.00	-3	20.00	-2	50.00	7	75.00	1	100.0	-11
para-Isopropyl Toluene			0.500	0	2.000	7	5.000	3	10.00	-4	20.00	-1	50.00	5	75.00	1	100.0	-10
1,3-Dichlorobenzene			0.500	-2	2.000	8	5.000	-2	10.00	-7	20.00	4	50.00	2	75.00	1	100.0	-4
1,4-Dichlorobenzene			0.500	2	2.000	7	5.000	-5	10.00	-6	20.00	5	50.00	3	75.00	-1	100.0	-4
n-Butylbenzene			0.500	2	2.000	7	5.000	3	10.00	-5	20.00	-2	50.00	4	75.00	1	100.0	-11
1,2-Dichlorobenzene			0.500	2	2.000	1	5.000	-5	10.00	-7	20.00	6	50.00	4	75.00	1	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	3	5.000	-16	10.00	-5	20.00	7	50.00	6	75.00	1	100.0	4
1,2,4-Trichlorobenzene			0.500	13	2.000	0	5.000	-8	10.00	-9	20.00	3	50.00	2	75.00	1	100.0	-2
Hexachlorobutadiene					2.000	1	5.000	2	10.00	-8	20.00	-5	50.00	10	75.00	9	100.0	-8
Naphthalene			0.500	-1	2.000	-4	5.000	-9	10.00	-8	20.00	8	50.00	6	75.00	3	100.0	4
1,2,3-Trichlorobenzene			0.500	-4	2.000	-2	5.000	-8	10.00	-8	20.00	7	50.00	6	75.00	5	100.0	4
Dibromofluoromethane	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	3
1,2-Dichloroethane-d4	50.00	3	50.00	3	50.00	3	50.00	-1	50.00	1	50.00	0	50.00	-2	50.00	-3	50.00	-6
Toluene-d8	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	1	50.00	0	50.00	1
Bromofluorobenzene	50.00	1	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	-2

BO 09/09/09 : All manual integrations made due to spliting of peaks, fronting/tailing of peaks.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Cal Date : 09-SEP-2009 Type : WATER

ICV 499363592008 (ji908 09-SEP-2009) stds: S12922 (10000X), S12589 (10000X), S12693 (10000X), S12845 (10000X), S12692 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	29.32	ug/L	17	25	
Chloromethane	25.00	24.90	ug/L	0	25	
Vinyl Chloride	25.00	26.28	ug/L	5	25	
Bromomethane	25.00	31.48	ug/L	**26**	25	v+
Chloroethane	25.00	27.31	ug/L	9	25	
Trichlorofluoromethane	25.00	28.98	ug/L	16	25	
Acetone	25.00	18.24	ug/L	-27	25	v-
1,1-Dichloroethene	25.00	28.82	ug/L	15	25	
Iodomethane	25.00	31.45	ug/L	**26**	25	v+
Methylene Chloride	25.00	26.17	ug/L	5	25	
Carbon Disulfide	25.00	26.03	ug/L	4	25	
MTBE	25.00	24.63	ug/L	-1	25	
trans-1,2-Dichloroethene	25.00	28.76	ug/L	15	25	
Vinyl Acetate	25.00	38.34	ug/L	**53**	25	v+
1,1-Dichloroethane	25.00	26.61	ug/L	6	25	
2-Butanone	25.00	22.86	ug/L	-9	25	
2,2-Dichloropropane	25.00	36.55	ug/L	**46**	25	v+
cis-1,2-Dichloroethene	25.00	26.30	ug/L	5	25	
Chloroform	25.00	26.11	ug/L	4	25	
Bromochloromethane	25.00	27.34	ug/L	9	25	
1,1,1-Trichloroethane	25.00	28.43	ug/L	14	25	
1,1-Dichloropropene	25.00	29.41	ug/L	18	25	
Carbon Tetrachloride	25.00	30.22	ug/L	**21**	25	
1,2-Dichloroethane	25.00	27.43	ug/L	10	25	
Benzene	25.00	27.27	ug/L	9	25	
Trichloroethene	25.00	26.38	ug/L	6	25	
1,2-Dichloropropane	25.00	26.11	ug/L	4	25	
Bromodichloromethane	25.00	27.62	ug/L	10	25	
Dibromomethane	25.00	27.33	ug/L	9	25	
4-Methyl-2-Pentanone	25.00	26.31	ug/L	5	25	
cis-1,3-Dichloropropene	25.00	29.76	ug/L	19	25	
Toluene	25.00	26.06	ug/L	4	25	
trans-1,3-Dichloropropene	25.00	26.81	ug/L	7	25	
1,1,2-Trichloroethane	25.00	27.24	ug/L	9	25	
2-Hexanone	25.00	24.55	ug/L	-2	25	
1,3-Dichloropropane	25.00	27.44	ug/L	10	25	
Tetrachloroethene	25.00	29.54	ug/L	18	25	
Dibromochloromethane	25.00	27.93	ug/L	12	25	
1,2-Dibromoethane	25.00	27.99	ug/L	12	25	
Chlorobenzene	25.00	27.18	ug/L	9	25	
1,1,1,2-Tetrachloroethane	25.00	28.01	ug/L	12	25	
Ethylbenzene	25.00	27.83	ug/L	11	25	
m,p-Xylenes	50.00	55.10	ug/L	10	25	
o-Xylene	25.00	27.21	ug/L	9	25	
Styrene	25.00	27.51	ug/L	10	25	
Bromoform	25.00	27.68	ug/L	11	25	
Isopropylbenzene	25.00	25.46	ug/L	2	25	
1,1,2,2-Tetrachloroethane	25.00	29.72	ug/L	19	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	27.54	ug/L	10	25	
Propylbenzene	25.00	28.98	ug/L	16	25	
Bromobenzene	25.00	27.73	ug/L	11	25	
1,3,5-Trimethylbenzene	25.00	28.85	ug/L	15	25	
2-Chlorotoluene	25.00	28.27	ug/L	13	25	
4-Chlorotoluene	25.00	27.28	ug/L	9	25	
tert-Butylbenzene	25.00	29.55	ug/L	18	25	
1,2,4-Trimethylbenzene	25.00	28.01	ug/L	12	25	
sec-Butylbenzene	25.00	30.70	ug/L	**23**	25	
para-Isopropyl Toluene	25.00	29.18	ug/L	17	25	
1,3-Dichlorobenzene	25.00	27.77	ug/L	11	25	
1,4-Dichlorobenzene	25.00	27.38	ug/L	10	25	
n-Butylbenzene	25.00	31.80	ug/L	**27**	25	v+
1,2-Dichlorobenzene	25.00	27.52	ug/L	10	25	
1,2-Dibromo-3-Chloropropane	25.00	28.72	ug/L	15	25	
1,2,4-Trichlorobenzene	25.00	27.62	ug/L	10	25	
Hexachlorobutadiene	25.00	32.03	ug/L	**28**	25	v+
Naphthalene	25.00	28.17	ug/L	13	25	
1,2,3-Trichlorobenzene	25.00	29.05	ug/L	16	25	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215071 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	**-24**	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	**21**	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	**35**	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	**-23**	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	**97**	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	**41**	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	**24**	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	**-22**	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : QC514490 IDF : 1.0
Seqnum : 469393599025.2 File : giu25 Time : 30-SEP-2009 20:44
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S13055 (10000X), S12693 (10000X), S12925 (10000X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Freon 12	0.3881	0.4271	25.00	27.51	ug/L	10	25	u
Chloromethane	0.4298	0.4234	25.00	24.63	ug/L	-1	25	u
Vinyl Chloride	0.3975	0.3921	25.00	24.66	ug/L	-1	25	u
Bromomethane	0.2463	0.2485	25.00	25.23	ug/L	1	25	u
Chloroethane	0.2623	0.2576	25.00	24.55	ug/L	-2	25	c+ u ***
Trichlorofluoromethane	0.5496	0.5735	25.00	26.09	ug/L	4	25	u
Iodomethane	0.4983	0.5413	25.00	27.16	ug/L	9	25	u
Acetone	0.1368	0.1547	25.00	28.27	ug/L	13	25	u
1,1-Dichloroethene	0.3241	0.3285	25.00	25.34	ug/L	1	25	u
Methylene Chloride	0.4365	0.4322	25.00	24.75	ug/L	-1	25	u
Carbon Disulfide	1.3118	1.1013	25.00	20.99	ug/L	-16	25	u
MTBE	1.2989	1.3172	25.00	25.35	ug/L	1	25	u
trans-1,2-Dichloroethene	0.3994	0.4188	25.00	26.21	ug/L	5	25	u
Vinyl Acetate	0.7945	0.8307	25.00	26.14	ug/L	5	25	u
1,1-Dichloroethane	0.7081	0.7296	25.00	25.76	ug/L	3	25	u
2-Butanone	0.1971	0.2208	25.00	28.00	ug/L	12	25	u
cis-1,2-Dichloroethene	0.4558	0.4646	25.00	25.48	ug/L	2	25	u
2,2-Dichloropropane	0.5399	0.5761	25.00	26.68	ug/L	7	25	u
Chloroform	0.6834	0.6865	25.00	25.11	ug/L	0	25	u
Bromochloromethane	0.2114	0.2244	25.00	26.53	ug/L	6	25	u
1,1,1-Trichloroethane	0.5314	0.5568	25.00	26.19	ug/L	5	25	u
1,1-Dichloropropene	0.3398	0.3683	25.00	27.10	ug/L	8	25	u
Carbon Tetrachloride	0.2851	0.3047	25.00	26.72	ug/L	7	25	u
1,2-Dichloroethane	0.3255	0.3489	25.00	26.79	ug/L	7	25	u
Benzene	1.1511	1.1859	25.00	25.76	ug/L	3	25	u
Trichloroethene	0.2681	0.2776	25.00	25.89	ug/L	4	25	u
1,2-Dichloropropane	0.3010	0.3097	25.00	25.72	ug/L	3	25	u
Bromodichloromethane	0.3281	0.3495	25.00	26.63	ug/L	7	25	u
Dibromomethane	0.1579	0.1709	25.00	27.06	ug/L	8	25	u
4-Methyl-2-Pentanone	0.2602	0.2858	25.00	27.46	ug/L	10	25	u
cis-1,3-Dichloropropene	0.4502	0.5035	25.00	27.96	ug/L	12	25	u
Toluene	0.7973	0.8006	25.00	25.10	ug/L	0	25	u
trans-1,3-Dichloropropene	0.4416	0.4540	25.00	25.70	ug/L	3	25	u
1,1,2-Trichloroethane	0.1371	0.1526	25.00	27.83	ug/L	11	25	u
2-Hexanone	0.1976	0.2181	25.00	27.59	ug/L	10	25	u
1,3-Dichloropropane	0.4586	0.5117	25.00	27.90	ug/L	12	25	u
Tetrachloroethene	0.2959	0.3192	25.00	26.96	ug/L	8	25	u
Dibromochloromethane	0.2590	0.2870	25.00	27.71	ug/L	11	25	u
1,2-Dibromoethane	0.2600	0.2900	25.00	27.89	ug/L	12	25	u
Chlorobenzene	0.8605	0.8976	25.00	26.08	ug/L	4	25	u
1,1,1,2-Tetrachloroethane	0.2786	0.2962	25.00	26.58	ug/L	6	25	u
Ethylbenzene	1.4339	1.5094	25.00	26.32	ug/L	5	25	u
m,p-Xylenes	0.5781	0.6116	50.00	52.90	ug/L	6	25	u
o-Xylene	0.5739	0.6032	25.00	26.28	ug/L	5	25	u
Styrene	0.9770	1.0484	25.00	26.83	ug/L	7	25	u
Bromoform	0.1789	0.2032	25.00	28.39	ug/L	14	25	u
Isopropylbenzene	2.3888	2.2701	25.00	23.76	ug/L	-5	25	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6745	25.00	28.40	ug/L	14	25	u
1,2,3-Trichloropropane	0.5719	0.6447	25.00	28.18	ug/L	13	25	u
Propylbenzene	2.8529	3.0672	25.00	26.88	ug/L	8	25	u
Bromobenzene	0.6683	0.7073	25.00	26.46	ug/L	6	25	u
1,3,5-Trimethylbenzene	2.0645	2.2166	25.00	26.84	ug/L	7	25	u
2-Chlorotoluene	1.9799	2.0910	25.00	26.40	ug/L	6	25	u
4-Chlorotoluene	1.8670	1.9405	25.00	25.98	ug/L	4	25	u
tert-Butylbenzene	1.7428	1.9058	25.00	27.34	ug/L	9	25	u
1,2,4-Trimethylbenzene	2.1510	2.2802	25.00	26.50	ug/L	6	25	u
sec-Butylbenzene	2.4704	2.7887	25.00	28.22	ug/L	13	25	u
para-Isopropyl Toluene	2.1994	2.3454	25.00	26.66	ug/L	7	25	u
1,3-Dichlorobenzene	1.2427	1.3045	25.00	26.24	ug/L	5	25	u
1,4-Dichlorobenzene	1.2881	1.3544	25.00	26.29	ug/L	5	25	u
n-Butylbenzene	1.9009	2.1913	25.00	28.82	ug/L	15	25	u
1,2-Dichlorobenzene	1.1869	1.2630	25.00	26.60	ug/L	6	25	u
1,2-Dibromo-3-Chloropropane	0.1121	0.1234	25.00	27.52	ug/L	10	25	u
1,2,4-Trichlorobenzene	0.8807	0.9388	25.00	26.65	ug/L	7	25	u
Hexachlorobutadiene	0.3325	0.3892	25.00	29.26	ug/L	17	25	u
Naphthalene	1.6883	2.0564	25.00	30.45	ug/L	22	25	u
1,2,3-Trichlorobenzene	0.7629	0.8579	25.00	28.11	ug/L	12	25	u

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1130008	1.37	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1707430	1.85	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1634797	1.48	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	929042	-0.29	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 IDF : 1.0
Seqnum : 469393599024.1 File : giu24 Time : 30-SEP-2009 20:13
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12998 (14290X), S13032 (14290X), S12929 (14290X), S12565 (28570X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4212	35.00	37.99	ug/L	9	20	0.0500	
Chloromethane	0.4298	0.4250	35.00	34.61	ug/L	-1	20	0.1000	
Vinyl Chloride	0.3975	0.4159	35.00	36.62	ug/L	5	20	0.0500	
Bromomethane	0.2463	0.2270	35.00	32.25	ug/L	-8	20	0.0500	
Chloroethane	0.2623	0.3329	35.00	44.42	ug/L	**27**	20	0.0500	c+ ***
Trichlorofluoromethane	0.5496	0.5826	35.00	37.10	ug/L	6	20	0.0500	
Acetone	0.1368	0.1178	35.00	30.14	ug/L	-14	20	0.0500	
1,1-Dichloroethene	0.3241	0.3284	35.00	35.46	ug/L	1	20	0.0500	
Iodomethane	0.4983	0.5047	35.00	35.45	ug/L	1	20	0.0500	
Methylene Chloride	0.4365	0.3972	35.00	31.85	ug/L	-9	20	0.0500	
Carbon Disulfide	1.3118	1.3368	35.00	35.67	ug/L	2	20	0.0500	
MTBE	1.2989	1.2936	35.00	34.86	ug/L	0	20	0.0500	
trans-1,2-Dichloroethene	0.3994	0.3796	35.00	33.27	ug/L	-5	20	0.0500	
Vinyl Acetate	0.7945	0.9077	35.00	39.99	ug/L	14	20	0.0500	
1,1-Dichloroethane	0.7081	0.6828	35.00	33.75	ug/L	-4	20	0.1000	
2-Butanone	0.1971	0.1975	35.00	35.07	ug/L	0	20	0.0500	
2,2-Dichloropropane	0.5399	0.5632	35.00	36.52	ug/L	4	20	0.0500	
cis-1,2-Dichloroethene	0.4558	0.4329	35.00	33.24	ug/L	-5	20	0.0500	
Chloroform	0.6834	0.6307	35.00	32.30	ug/L	-8	20	0.0500	
Bromochloromethane	0.2114	0.2093	35.00	34.65	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.5314	0.5269	35.00	34.70	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.3398	0.3449	35.00	35.52	ug/L	1	20	0.0500	
Carbon Tetrachloride	0.2851	0.2874	35.00	35.29	ug/L	1	20	0.0500	
1,2-Dichloroethane	0.3255	0.3183	35.00	34.23	ug/L	-2	20	0.0500	
Benzene	1.1511	1.0863	35.00	33.03	ug/L	-6	20	0.0500	
Trichloroethene	0.2681	0.2539	35.00	33.15	ug/L	-5	20	0.0500	
1,2-Dichloropropane	0.3010	0.2898	35.00	33.69	ug/L	-4	20	0.0500	
Bromodichloromethane	0.3281	0.3141	35.00	33.50	ug/L	-4	20	0.0500	
Dibromomethane	0.1579	0.1567	35.00	34.73	ug/L	-1	20	0.0500	
4-Methyl-2-Pentanone	0.2602	0.2770	35.00	37.26	ug/L	6	20	0.0500	
cis-1,3-Dichloropropene	0.4502	0.4434	35.00	34.47	ug/L	-2	20	0.0500	
Toluene	0.7973	0.7193	35.00	31.58	ug/L	-10	20	0.0500	
trans-1,3-Dichloropropene	0.4416	0.4389	35.00	34.79	ug/L	-1	20	0.0500	
1,1,2-Trichloroethane	0.1371	0.1354	35.00	34.58	ug/L	-1	20	0.0500	
2-Hexanone	0.1976	0.1994	35.00	35.33	ug/L	1	20	0.0500	
1,3-Dichloropropane	0.4586	0.4553	35.00	34.74	ug/L	-1	20	0.0500	
Tetrachloroethene	0.2959	0.2859	35.00	33.81	ug/L	-3	20	0.0500	
Dibromochloromethane	0.2590	0.2571	35.00	34.75	ug/L	-1	20	0.0500	
1,2-Dibromoethane	0.2600	0.2605	35.00	35.07	ug/L	0	20	0.0500	
Chlorobenzene	0.8605	0.7989	35.00	32.49	ug/L	-7	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2786	0.2635	35.00	33.10	ug/L	-5	20	0.0500	
Ethylbenzene	1.4339	1.3225	35.00	32.28	ug/L	-8	20	0.0500	
m,p-Xylenes	0.5781	0.5371	70.00	65.04	ug/L	-7	20	0.0500	
o-Xylene	0.5739	0.5280	35.00	32.20	ug/L	-8	20	0.0500	
Styrene	0.9770	0.9198	35.00	32.95	ug/L	-6	20	0.0500	
Bromoform	0.1789	0.1836	35.00	35.92	ug/L	3	20	0.1000	
Isopropylbenzene	2.3888	2.2340	35.00	32.73	ug/L	-6	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.5991	35.00	35.31	ug/L	1	20	0.3000	
1,2,3-Trichloropropane	0.5719	0.5654	35.00	34.60	ug/L	-1	20	0.0500	
Propylbenzene	2.8529	2.6461	35.00	32.46	ug/L	-7	20	0.0500	
Bromobenzene	0.6683	0.6234	35.00	32.65	ug/L	-7	20	0.0500	
1,3,5-Trimethylbenzene	2.0645	1.8827	35.00	31.92	ug/L	-9	20	0.0500	
2-Chlorotoluene	1.9799	1.7935	35.00	31.70	ug/L	-9	20	0.0500	
4-Chlorotoluene	1.8670	1.7060	35.00	31.98	ug/L	-9	20	0.0500	
tert-Butylbenzene	1.7428	1.5867	35.00	31.87	ug/L	-9	20	0.0500	
1,2,4-Trimethylbenzene	2.1510	1.9298	35.00	31.40	ug/L	-10	20	0.0500	
sec-Butylbenzene	2.4704	2.2802	35.00	32.30	ug/L	-8	20	0.0500	
para-Isopropyl Toluene	2.1994	1.9959	35.00	31.76	ug/L	-9	20	0.0500	
1,3-Dichlorobenzene	1.2427	1.1311	35.00	31.86	ug/L	-9	20	0.0500	
1,4-Dichlorobenzene	1.2881	1.1762	35.00	31.96	ug/L	-9	20	0.0500	
n-Butylbenzene	1.9009	1.7543	35.00	32.30	ug/L	-8	20	0.0500	
1,2-Dichlorobenzene	1.1869	1.0929	35.00	32.23	ug/L	-8	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1121	0.1071	35.00	33.43	ug/L	-4	20	0.0500	
1,2,4-Trichlorobenzene	0.8807	0.7987	35.00	31.74	ug/L	-9	20	0.0500	
Hexachlorobutadiene	0.3325	0.3017	35.00	31.76	ug/L	-9	20	0.0500	
Naphthalene	1.6883	1.6926	35.00	35.09	ug/L	0	20	0.0500	
1,2,3-Trichlorobenzene	0.7629	0.7028	35.00	32.25	ug/L	-8	20	0.0500	
Dibromofluoromethane	0.4079	0.4122	50.00	50.53	ug/L	1	20	0.0500	
1,2-Dichloroethane-d4	0.3076	0.3101	50.00	50.41	ug/L	1	20	0.0500	
Toluene-d8	1.2934	1.2948	50.00	50.06	ug/L	0	20	0.0500	
Bromofluorobenzene	0.8717	0.8774	50.00	50.33	ug/L	1	20	0.0500	

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1126370	1.05	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1709718	1.99	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1641588	1.90	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	936312	0.49	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : QC514565 IDF : 1.0
Seqnum : 469395137013.2 File : gj113 Time : 01-OCT-2009 16:14
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (12500X), S13055 (12500X), S12693 (12500X), S12925 (12500X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4094	20.00	21.10	ug/L	5	20	0.0500	u
Chloromethane	0.4298	0.4299	20.00	20.00	ug/L	0	20	0.1000	u
Vinyl Chloride	0.3975	0.3885	20.00	19.55	ug/L	-2	20	0.0500	u
Bromomethane	0.2463	0.2101	20.00	17.06	ug/L	-15	20	0.0500	u
Chloroethane	0.2623	0.3316	20.00	25.29	ug/L	**26**	20	0.0500	c+ u ***
Trichlorofluoromethane	0.5496	0.5590	20.00	20.34	ug/L	2	20	0.0500	u
Iodomethane	0.4983	0.3398	20.00	13.64	ug/L	**-32**	20	0.0500	c- u ***
Acetone	0.1368	0.1216	20.00	17.77	ug/L	-11	20	0.0500	u
1,1-Dichloroethene	0.3241	0.3364	20.00	20.76	ug/L	4	20	0.0500	u
Methylene Chloride	0.4365	0.4332	20.00	19.85	ug/L	-1	20	0.0500	u
Carbon Disulfide	1.3118	1.1129	20.00	16.97	ug/L	-15	20	0.0500	u
MTBE	1.2989	1.2180	20.00	18.75	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.3994	0.4194	20.00	21.00	ug/L	5	20	0.0500	u
Vinyl Acetate	0.7945	0.6283	20.00	15.82	ug/L	**-21**	20	0.0500	c- u ***
1,1-Dichloroethane	0.7081	0.7362	20.00	20.79	ug/L	4	20	0.1000	u
2-Butanone	0.1971	0.1847	20.00	18.74	ug/L	-6	20	0.0500	u
cis-1,2-Dichloroethene	0.4558	0.4596	20.00	20.17	ug/L	1	20	0.0500	u
2,2-Dichloropropane	0.5399	0.5401	20.00	20.01	ug/L	0	20	0.0500	u
Chloroform	0.6834	0.6884	20.00	20.15	ug/L	1	20	0.0500	u
Bromochloromethane	0.2114	0.2146	20.00	20.30	ug/L	1	20	0.0500	u
1,1,1-Trichloroethane	0.5314	0.5742	20.00	21.61	ug/L	8	20	0.0500	u
1,1-Dichloropropene	0.3398	0.3774	20.00	22.21	ug/L	11	20	0.0500	u
Carbon Tetrachloride	0.2851	0.3120	20.00	21.89	ug/L	9	20	0.0500	u
1,2-Dichloroethane	0.3255	0.3384	20.00	20.79	ug/L	4	20	0.0500	u
Benzene	1.1511	1.1887	20.00	20.65	ug/L	3	20	0.0500	u
Trichloroethene	0.2681	0.2876	20.00	21.46	ug/L	7	20	0.0500	u
1,2-Dichloropropane	0.3010	0.3035	20.00	20.16	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3281	0.3375	20.00	20.57	ug/L	3	20	0.0500	u
Dibromomethane	0.1579	0.1624	20.00	20.58	ug/L	3	20	0.0500	u
4-Methyl-2-Pentanone	0.2602	0.2577	20.00	19.81	ug/L	-1	20	0.0500	u
cis-1,3-Dichloropropene	0.4502	0.4815	20.00	21.39	ug/L	7	20	0.0500	u
Toluene	0.7973	0.8278	20.00	20.77	ug/L	4	20	0.0500	u
trans-1,3-Dichloropropene	0.4416	0.4413	20.00	19.99	ug/L	0	20	0.0500	u
1,1,2-Trichloroethane	0.1371	0.1493	20.00	21.78	ug/L	9	20	0.0500	u
2-Hexanone	0.1976	0.1974	20.00	19.98	ug/L	0	20	0.0500	u
1,3-Dichloropropane	0.4586	0.5101	20.00	22.25	ug/L	11	20	0.0500	u
Tetrachloroethene	0.2959	0.3323	20.00	22.46	ug/L	12	20	0.0500	u
Dibromochloromethane	0.2590	0.2700	20.00	20.86	ug/L	4	20	0.0500	u
1,2-Dibromoethane	0.2600	0.2810	20.00	21.62	ug/L	8	20	0.0500	u
Chlorobenzene	0.8605	0.9093	20.00	21.13	ug/L	6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.2786	0.2947	20.00	21.16	ug/L	6	20	0.0500	u
Ethylbenzene	1.4339	1.5523	20.00	21.65	ug/L	8	20	0.0500	u
m,p-Xylenes	0.5781	0.6235	40.00	43.14	ug/L	8	20	0.0500	u
o-Xylene	0.5739	0.6088	20.00	21.22	ug/L	6	20	0.0500	u
Styrene	0.9770	1.0421	20.00	21.33	ug/L	7	20	0.0500	u
Bromoform	0.1789	0.1777	20.00	19.86	ug/L	-1	20	0.1000	u
Isopropylbenzene	2.3888	2.4114	20.00	20.19	ug/L	1	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6372	20.00	21.46	ug/L	7	20	0.3000	u
1,2,3-Trichloropropane	0.5719	0.6406	20.00	22.40	ug/L	12	20	0.0500	u
Propylbenzene	2.8529	3.2566	20.00	22.83	ug/L	14	20	0.0500	u
Bromobenzene	0.6683	0.7248	20.00	21.69	ug/L	8	20	0.0500	u
1,3,5-Trimethylbenzene	2.0645	2.3239	20.00	22.51	ug/L	13	20	0.0500	u
2-Chlorotoluene	1.9799	2.2075	20.00	22.30	ug/L	11	20	0.0500	u
4-Chlorotoluene	1.8670	2.0188	20.00	21.63	ug/L	8	20	0.0500	u
tert-Butylbenzene	1.7428	2.0123	20.00	23.09	ug/L	15	20	0.0500	u
1,2,4-Trimethylbenzene	2.1510	2.3890	20.00	22.21	ug/L	11	20	0.0500	u
sec-Butylbenzene	2.4704	2.9285	20.00	23.71	ug/L	19	20	0.0500	u
para-Isopropyl Toluene	2.1994	2.4299	20.00	22.10	ug/L	10	20	0.0500	u
1,3-Dichlorobenzene	1.2427	1.3359	20.00	21.50	ug/L	8	20	0.0500	u
1,4-Dichlorobenzene	1.2881	1.3846	20.00	21.50	ug/L	7	20	0.0500	u
n-Butylbenzene	1.9009	2.2478	20.00	23.65	ug/L	18	20	0.0500	u
1,2-Dichlorobenzene	1.1869	1.2871	20.00	21.69	ug/L	8	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1121	0.1123	20.00	20.04	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	0.8807	0.9185	20.00	20.86	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.3325	0.3816	20.00	22.95	ug/L	15	20	0.0500	u
Naphthalene	1.6883	1.9128	20.00	22.66	ug/L	13	20	0.0500	u
1,2,3-Trichlorobenzene	0.7629	0.8344	20.00	21.88	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.4079	0.4139	50.00	50.72	ug/L	1	20	0.0500	u
1,2-Dichloroethane-d4	0.3076	0.3155	50.00	51.29	ug/L	3	20	0.0500	u
Toluene-d8	1.2934	1.3412	50.00	51.85	ug/L	4	20	0.0500	u
Bromofluorobenzene	0.8717	0.8988	50.00	51.55	ug/L	3	20	0.0500	u

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1132189	1.57	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1721584	2.69	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1583957	-1.68	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	866769	-6.98	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC514544 IDF : 1.0
Seqnum : 499395015003.5 File : jj103 Time : 01-OCT-2009 08:41
Cal : 499361940002 Caldate : 09-SEP-2009 Caltype : WATER
Standards: S12924 (10000X), S12996 (10000X), S12693 (10000X), S12845 (10000X), S13008 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6722	0.8509	25.00	31.64	ug/L	**27**	20	0.0500	c+ u ***
Chloromethane	1.3456	1.2409	25.00	23.05	ug/L	-8	20	0.1000	u
Vinyl Chloride	0.9782	0.9796	25.00	25.04	ug/L	0	20	0.0500	u
Bromomethane	0.5070	0.4079	25.00	20.11	ug/L	-20	20	0.0500	u v+ ***
Chloroethane	0.5684	0.5578	25.00	24.54	ug/L	-2	20	0.0500	u
Trichlorofluoromethane	0.7017	0.8023	25.00	28.59	ug/L	14	20	0.0500	u
Iodomethane	0.4848	0.4856	25.00	21.93	ug/L	-12	20	0.0500	u v+ ***
Acetone	0.3243	0.2851	25.00	21.98	ug/L	-12	20	0.0500	u v- ***
1,1-Dichloroethene	0.4750	0.5108	25.00	26.88	ug/L	8	20	0.0500	u
Methylene Chloride	0.7214	0.7689	25.00	26.65	ug/L	7	20	0.0500	u
Carbon Disulfide	2.1545	2.0608	25.00	23.91	ug/L	-4	20	0.0500	u
MTBE	1.8042	1.6960	25.00	23.50	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.5607	0.6389	25.00	28.49	ug/L	14	20	0.0500	u
Vinyl Acetate	1.4763	1.4796	25.00	25.06	ug/L	0	20	0.0500	rsd u v+ ***
1,1-Dichloroethane	1.3302	1.4930	25.00	28.06	ug/L	12	20	0.1000	u
2-Butanone	0.4512	0.3933	25.00	21.79	ug/L	-13	20	0.0500	u
cis-1,2-Dichloroethene	0.6508	0.7138	25.00	27.42	ug/L	10	20	0.0500	u
2,2-Dichloropropane	0.6245	0.8392	25.00	33.60	ug/L	**34**	20	0.0500	c+ u v+ ***
Chloroform	1.1050	1.2355	25.00	27.95	ug/L	12	20	0.0500	u
Bromochloromethane	0.2966	0.3327	25.00	28.05	ug/L	12	20	0.0500	u
1,1,1-Trichloroethane	0.6684	0.7918	25.00	29.62	ug/L	18	20	0.0500	u
1,1-Dichloropropene	0.4771	0.5751	25.00	30.14	ug/L	**21**	20	0.0500	c+ u ***
Carbon Tetrachloride	0.3093	0.3779	25.00	30.55	ug/L	**22**	20	0.0500	c+ u ***
1,2-Dichloroethane	0.5373	0.6067	25.00	28.23	ug/L	13	20	0.0500	u
Benzene	1.4764	1.6751	25.00	28.37	ug/L	13	20	0.0500	u
Trichloroethene	0.3563	0.4014	25.00	28.17	ug/L	13	20	0.0500	u
1,2-Dichloropropane	0.4879	0.5531	25.00	28.34	ug/L	13	20	0.0500	u
Bromodichloromethane	0.4922	0.5588	25.00	28.38	ug/L	14	20	0.0500	u
Dibromomethane	0.2437	0.2722	25.00	27.92	ug/L	12	20	0.0500	u
4-Methyl-2-Pentanone	0.5464	0.5079	25.00	23.24	ug/L	-7	20	0.0500	u
cis-1,3-Dichloropropene	0.6236	0.7351	25.00	29.47	ug/L	18	20	0.0500	u
Toluene	1.0349	1.1067	25.00	26.73	ug/L	7	20	0.0500	u
trans-1,3-Dichloropropene	0.6910	0.7017	25.00	25.39	ug/L	2	20	0.0500	u
1,1,2-Trichloroethane	0.2224	0.2411	25.00	27.10	ug/L	8	20	0.0500	u
2-Hexanone	0.4858	0.4397	25.00	22.63	ug/L	-9	20	0.0500	u
1,3-Dichloropropane	0.7051	0.7684	25.00	27.25	ug/L	9	20	0.0500	u
Tetrachloroethene	0.3459	0.4153	25.00	30.01	ug/L	20	20	0.0500	u
Dibromochloromethane	0.3954	0.4267	25.00	26.98	ug/L	8	20	0.0500	u
1,2-Dibromoethane	0.3869	0.4088	25.00	26.41	ug/L	6	20	0.0500	u
Chlorobenzene	1.0346	1.1463	25.00	27.70	ug/L	11	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3459	0.3959	25.00	28.61	ug/L	14	20	0.0500	u
Ethylbenzene	1.8635	2.1340	25.00	28.63	ug/L	15	20	0.0500	u
m,p-Xylenes	0.6570	0.7325	50.00	55.75	ug/L	11	20	0.0500	u
o-Xylene	0.6512	0.7340	25.00	28.18	ug/L	13	20	0.0500	u
Styrene	1.1888	1.3313	25.00	28.00	ug/L	12	20	0.0500	u
Bromoform	0.2714	0.2556	25.00	23.55	ug/L	-6	20	0.1000	u
Isopropylbenzene	3.2665	3.2748	25.00	25.06	ug/L	0	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9412	0.9691	25.00	25.74	ug/L	3	20	0.3000	u
1,2,3-Trichloropropane	0.9136	0.9269	25.00	25.37	ug/L	1	20	0.0500	u
Propylbenzene	4.2647	4.8367	25.00	28.35	ug/L	13	20	0.0500	u
Bromobenzene	0.8845	0.9969	25.00	28.18	ug/L	13	20	0.0500	u
1,3,5-Trimethylbenzene	2.7013	3.0293	25.00	28.04	ug/L	12	20	0.0500	u
2-Chlorotoluene	2.8907	3.2741	25.00	28.32	ug/L	13	20	0.0500	u
4-Chlorotoluene	2.7428	2.9871	25.00	27.23	ug/L	9	20	0.0500	u
tert-Butylbenzene	2.1224	2.3865	25.00	28.11	ug/L	12	20	0.0500	u
1,2,4-Trimethylbenzene	2.7905	3.0412	25.00	27.25	ug/L	9	20	0.0500	u
sec-Butylbenzene	3.2955	3.7628	25.00	28.55	ug/L	14	20	0.0500	u
para-Isopropyl Toluene	2.5799	2.7709	25.00	26.85	ug/L	7	20	0.0500	u
1,3-Dichlorobenzene	1.5676	1.6881	25.00	26.92	ug/L	8	20	0.0500	u
1,4-Dichlorobenzene	1.6423	1.7459	25.00	26.58	ug/L	6	20	0.0500	u
n-Butylbenzene	2.5751	2.8793	25.00	27.95	ug/L	12	20	0.0500	u v+ ***
1,2-Dichlorobenzene	1.4998	1.5882	25.00	26.47	ug/L	6	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1600	0.1505	25.00	23.51	ug/L	-6	20	0.0500	u
1,2,4-Trichlorobenzene	0.8867	0.8242	25.00	23.24	ug/L	-7	20	0.0500	u
Hexachlorobutadiene	0.2858	0.3110	25.00	27.21	ug/L	9	20	0.0500	u v+ ***
Naphthalene	1.8902	1.8714	25.00	24.75	ug/L	-1	20	0.0500	u
1,2,3-Trichlorobenzene	0.7534	0.7256	25.00	24.08	ug/L	-4	20	0.0500	u
Dibromofluoromethane	0.5675	0.5871	50.00	51.73	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3948	0.4145	50.00	52.50	ug/L	5	20	0.0500	u
Toluene-d8	1.4119	1.4210	50.00	50.32	ug/L	1	20	0.0500	u
Bromofluorobenzene	1.0845	1.0903	50.00	50.26	ug/L	1	20	0.0500	u

ISTD (ICAL ji818)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	520002	795557	52.99	11.03	11.01	-0.02
1,4-Difluorobenzene	857205	1292396	50.77	12.19	12.18	-0.01
Chlorobenzene-d5	685604	1065118	55.35	16.09	16.08	-0.01
1,4-Dichlorobenzene-d4	340706	532254	56.22	18.79	18.78	-0.01

BO 10/01/09 : Standard # fixed in LIMS [general version]

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215071 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC514547 IDF : 1.0
Seqnum : 839395033005.4 File : kj105 Time : 01-OCT-2009 09:23
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (12500X), S12845 (12500X), S12693 (12500X), S12924 (12500X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.5609	20.00	20.95	ug/L	5	20	0.0500	u
Chloromethane	0.5160	0.5377	20.00	20.84	ug/L	4	20	0.1000	u
Vinyl Chloride	0.5175	0.5144	20.00	19.88	ug/L	-1	20	0.0500	u
Bromomethane	0.2608	0.2518	20.00	19.31	ug/L	-3	20	0.0500	u
Chloroethane	0.4094	0.3079	20.00	15.04	ug/L	**-25**	20	0.0500	c- u ***
Trichlorofluoromethane	0.7415	0.7904	20.00	21.32	ug/L	7	20	0.0500	u
Iodomethane	0.2599	0.3798	20.00	28.71	ug/L	**44**	20	0.0500	c+ u ***
Acetone	0.1382	0.1455	20.00	21.06	ug/L	5	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4103	20.00	21.90	ug/L	9	20	0.0500	u
Methylene Chloride	0.5280	0.5832	20.00	22.09	ug/L	10	20	0.0500	u
Carbon Disulfide	1.4090	1.4006	20.00	19.88	ug/L	-1	20	0.0500	u
MTBE	1.5447	1.6406	20.00	21.24	ug/L	6	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5386	20.00	23.60	ug/L	18	20	0.0500	u
Vinyl Acetate	0.9726	0.8788	20.00	18.07	ug/L	-10	20	0.0500	u
1,1-Dichloroethane	0.9405	0.9997	20.00	21.26	ug/L	6	20	0.1000	u
2-Butanone	0.2331	0.2342	20.00	20.10	ug/L	0	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6071	20.00	22.32	ug/L	12	20	0.0500	u
2,2-Dichloropropane	0.7134	0.8201	20.00	22.99	ug/L	15	20	0.0500	u
Chloroform	0.9238	1.0022	20.00	21.70	ug/L	8	20	0.0500	u
Bromochloromethane	0.2354	0.2828	20.00	24.02	ug/L	20	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.8295	20.00	23.59	ug/L	18	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4323	20.00	20.50	ug/L	3	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3880	20.00	22.28	ug/L	11	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4535	20.00	20.65	ug/L	3	20	0.0500	u
Benzene	1.3404	1.4043	20.00	20.95	ug/L	5	20	0.0500	u
Trichloroethene	0.3158	0.3719	20.00	23.55	ug/L	18	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3637	20.00	20.23	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3863	0.4376	20.00	22.65	ug/L	13	20	0.0500	u
Dibromomethane	0.1802	0.1999	20.00	22.19	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2755	20.00	18.10	ug/L	-9	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.5940	20.00	22.99	ug/L	15	20	0.0500	u
Toluene	0.9593	0.8719	20.00	18.18	ug/L	-9	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.4802	20.00	16.76	ug/L	-16	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1617	20.00	18.49	ug/L	-8	20	0.0500	u
2-Hexanone	0.2445	0.1691	20.00	13.83	ug/L	**-31**	20	0.0500	c- u ***
1,3-Dichloropropane	0.6133	0.5613	20.00	18.30	ug/L	-8	20	0.0500	u
Tetrachloroethene	0.3329	0.3214	20.00	19.31	ug/L	-3	20	0.0500	u
Dibromochloromethane	0.3027	0.2977	20.00	19.67	ug/L	-2	20	0.0500	u
1,2-Dibromoethane	0.3049	0.2911	20.00	19.09	ug/L	-5	20	0.0500	u
Chlorobenzene	1.0519	0.9747	20.00	18.53	ug/L	-7	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3191	20.00	19.01	ug/L	-5	20	0.0500	u
Ethylbenzene	1.8115	1.6886	20.00	18.64	ug/L	-7	20	0.0500	u
m,p-Xylenes	0.6304	0.5275	40.00	33.47	ug/L	-16	20	0.0500	u
o-Xylene	0.6283	0.5167	20.00	16.45	ug/L	-18	20	0.0500	u
Styrene	1.0367	0.8803	20.00	16.98	ug/L	-15	20	0.0500	u
Bromoform	0.1849	0.1964	20.00	18.66	ug/L	-7	20	0.1000	u
Isopropylbenzene	3.8595	3.0405	20.00	15.76	ug/L	**-21**	20	0.0500	c- u ***

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9003	20.00	18.78	ug/L	-6	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1244	20.00	21.97	ug/L	10	20	0.0500	u
Propylbenzene	3.9448	3.1369	20.00	15.90	ug/L	-20	20	0.0500	u
Bromobenzene	1.0220	1.1699	20.00	22.89	ug/L	14	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.1546	20.00	23.01	ug/L	15	20	0.0500	u
2-Chlorotoluene	3.1099	3.0883	20.00	19.86	ug/L	-1	20	0.0500	u
4-Chlorotoluene	2.6572	2.3651	20.00	17.80	ug/L	-11	20	0.0500	u
tert-Butylbenzene	2.1712	1.6802	20.00	15.48	ug/L	**-23**	20	0.0500	c- u ***
1,2,4-Trimethylbenzene	2.6384	3.2322	20.00	24.50	ug/L	**23**	20	0.0500	c+ u ***
sec-Butylbenzene	3.1284	2.6479	20.00	16.93	ug/L	-15	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.7384	20.00	21.96	ug/L	10	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6114	20.00	19.07	ug/L	-5	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5282	20.00	18.48	ug/L	-8	20	0.0500	u
n-Butylbenzene	2.4331	3.0181	20.00	29.91	ug/L	**50**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6033	20.00	19.89	ug/L	-1	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1550	20.00	17.62	ug/L	-12	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.3648	20.00	25.10	ug/L	**25**	20	0.0500	c+ u ***
Hexachlorobutadiene	0.4373	0.4745	20.00	21.70	ug/L	9	20	0.0500	u
Naphthalene	2.7279	3.6290	20.00	26.61	ug/L	**33**	20	0.0500	c+ u ***
1,2,3-Trichlorobenzene	1.0079	1.3207	20.00	26.21	ug/L	**31**	20	0.0500	c+ u ***
Dibromofluoromethane	0.4472	0.4514	50.00	50.46	ug/L	1	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3613	50.00	48.35	ug/L	-3	20	0.0500	u
Toluene-d8	1.4811	1.2899	50.00	43.54	ug/L	-13	20	0.0500	u
Bromofluorobenzene	1.2424	1.3969	50.00	56.22	ug/L	12	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1499027	-0.42	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	2620282	7.08	11.74	11.74	0.00
Chlorobenzene-d5	2136176	2792205	30.71	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	962810	-2.10	17.10	17.10	0.00

BO 10/01/09 : fixed QC# and batch in LIMS [general version]

5% spike rule

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 469393599

Date : 09/30/09 Reference : giu14
Sequence : MSVOA07 giu Analyzed : 09/30/09 14:13

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1114691	9.90	1676421	11.04	1610987	15.17	931776	17.89
		LOWER LIMIT	557346	9.40	838211	10.54	805494	14.67	465888	17.39
		UPPER LIMIT	2229382	10.40	3352842	11.54	3221974	15.67	1863552	18.39
024	CCV		1126370	9.90	1709718	11.04	1641588	15.17	936312	17.89
025	ICV/LCS	QC514490	1130008	9.90	1707430	11.04	1634797	15.17	929042	17.89
027	BLANK	QC514489	1105400	9.90	1676270	11.04	1598651	15.17	900780	17.89
028	SAMPLE	215071-001	1052752	9.90	1604924	11.04	1530307	15.17	854366	17.89
029	SAMPLE	215071-010	1059707	9.90	1611686	11.04	1538196	15.17	865014	17.89
030	SAMPLE	215010-010	1046717	9.90	1589716	11.04	1525513	15.17	856688	17.89
031	SAMPLE	215072-012	1028436	9.90	1574597	11.04	1509295	15.17	848868	17.89
032	SAMPLE	215071-002	1022375	9.90	1565039	11.04	1502013	15.17	842015	17.89
033	SAMPLE	215071-003	1012114	9.90	1546661	11.04	1492148	15.17	831302	17.89
034	SAMPLE	215071-004	1016587	9.90	1561740	11.04	1503566	15.17	849699	17.89
035	SAMPLE	215071-005	1088955	9.90	1665458	11.04	1590401	15.17	900318	17.89
036	SAMPLE	215071-007	1133091	9.90	1715341	11.04	1636639	15.17	923276	17.89
037	SAMPLE	215071-011	1153100	9.90	1748019	11.04	1664920	15.17	944608	17.89
038	SAMPLE	215071-012	1168227	9.90	1762272	11.04	1679601	15.17	946128	17.89
039	SAMPLE	215178-001	1243595	9.90	1876091	11.04	1787085	15.17	982493	17.89
040	SAMPLE	215178-002	1173145	9.90	1792905	11.04	1691729	15.17	934860	17.89
041	SAMPLE	215178-003	1128602	9.90	1724154	11.04	1638598	15.17	908613	17.89
042	SAMPLE	215071-006	1112178	9.90	1690821	11.04	1617442	15.17	906988	17.89
043	MSS	215071-013	1089898	9.90	1664789	11.04	1584558	15.17	889485	17.89
044	SAMPLE	215071-008	1080047	9.90	1652854	11.04	1586882	15.17	884442	17.89
045	MS	QC514491	1074134	9.90	1646885	11.04	1580510	15.17	899208	17.89
046	MSD	QC514492	1065177	9.90	1642209	11.04	1567375	15.17	889404	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 469395137

Date : 10/01/09 Reference : giu14
Sequence : MSVOA07 gj1 Analyzed : 09/30/09 14:13

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1114691	9.90	1676421	11.04	1610987	15.17	931776	17.89
		LOWER LIMIT	557346	9.40	838211	10.54	805494	14.67	465888	17.39
		UPPER LIMIT	2229382	10.40	3352842	11.54	3221974	15.67	1863552	18.39
003	CCV		1085092	9.90	1665487	11.04	1551217	15.17	861724	17.89
006	BLANK	QC514564	1057352	9.90	1616700	11.04	1499931	15.17	820140	17.89
007	SAMPLE	215064-004	1037102	9.90	1604959	11.04	1473849	15.17	802267	17.89
008	SAMPLE	215064-005	1129361	9.90	1715030	11.04	1592337	15.17	872629	17.89
009	SAMPLE	215072-007	1153934	9.90	1752987	11.04	1619329	15.17	897048	17.89
010	SAMPLE	215072-006	1157585	9.90	1744025	11.04	1618833	15.17	897037	17.89
013	CCV/BS	QC514565	1132189	9.90	1721584	11.04	1583957	15.17	866769	17.89
014	BSD	QC514566	1145226	9.90	1737553	11.04	1610223	15.17	895212	17.89
016	BLANK	QC514686	1097122	9.90	1676931	11.04	1550358	15.17	848899	17.89
017	SAMPLE	215097-002	1083024	9.90	1658319	11.04	1532686	15.17	834982	17.89
018	SAMPLE	215159-011	1053025	9.90	1616546	11.04	1503681	15.17	815300	17.89
019	SAMPLE	215071-013	1033148	9.90	1595500	11.04	1475530	15.17	797929	17.89
020	SAMPLE	215159-001	1016148	9.90	1574456	11.04	1459809	15.17	789243	17.89
021	SAMPLE	215159-002	999407	9.90	1554208	11.04	1439618	15.17	782459	17.89
022	SAMPLE	215159-003	984361	9.90	1537869	11.04	1426682	15.17	771893	17.89
023	SAMPLE	215159-005	979714	9.90	1532226	11.04	1422089	15.17	769813	17.89
024	SAMPLE	215159-006	961287	9.90	1518958	11.04	1406446	15.17	762125	17.89
025	SAMPLE	215159-007	948143	9.90	1501722	11.04	1396702	15.17	753083	17.89
026	SAMPLE	215159-008	942920	9.90	1486883	11.04	1376450	15.17	741156	17.89
027	SAMPLE	215159-010	952777	9.90	1507843	11.04	1398625	15.17	749717	17.89
028	SAMPLE	215173-001	934736	9.90	1480587	11.04	1374782	15.17	730990	17.89
029	SAMPLE	215173-002	934090	9.90	1477209	11.04	1373373	15.17	732745	17.89
030	SAMPLE	215173-003	917323	9.90	1459069	11.04	1354247	15.17	727914	17.89
031	SAMPLE	215159-004	915636	9.90	1454543	11.04	1348489	15.17	732691	17.89
032	SAMPLE	215159-009	901080	9.90	1434848	11.04	1331826	15.17	714351	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 499395015

Date : 10/01/09 Reference : ji818
Sequence : MSVOA10 jj1 Analyzed : 09/09/09 06:08

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	520002	11.03	857205	12.19	685604	16.09	340706	18.79
		LOWER LIMIT	260001	10.53	428603	11.69	342802	15.59	170353	18.29
		UPPER LIMIT	1040004	11.53	1714410	12.69	1371208	16.59	681412	19.29
003	CCV/BS	QC514544	795557	11.01	1292396	12.18	1065118	16.08	532254	18.78
004	BSD	QC514545	810154	11.02	1317191	12.18	1069915	16.08	533955	18.78
006	BLANK	QC514546	796740	11.02	1329224	12.18	1087622	16.08	535596	18.78
007	SAMPLE	215107-004	849833	11.02	1412627	12.17	1138310	16.08	559603	18.78
008	SAMPLE	215107-005	766841	11.01	1255215	12.17	1032753	16.08	507995	18.78
009	SAMPLE	215146-001	819352	11.01	1342543	12.17	1091329	16.08	545483	18.79
010	SAMPLE	215147-001	822755	11.02	1340561	12.18	1099190	16.08	551771	18.78
011	SAMPLE	215107-001	809370	11.02	1337412	12.18	1102785	16.09	547420	18.78
012	SAMPLE	215107-002	812244	11.02	1359304	12.18	1077302	16.08	522517	18.79
013	SAMPLE	215107-003	766029	11.02	1249703	12.18	1009518	16.09	497382	18.78
014	SAMPLE	215098-001	811626	11.03	1326906	12.19	1088719	16.09	538404	18.79
015	SAMPLE	215071-007	799173	11.02	1314907	12.18	1073279	16.09	522922	18.79
016	MSS	215107-009	818276	11.01	1313414	12.17	1055414	16.08	528987	18.79
017	SAMPLE	215107-006	772791	11.02	1263852	12.18	1013786	16.09	495884	18.78
018	SAMPLE	215107-007	800062	11.02	1304221	12.18	1059985	16.09	519818	18.79
019	SAMPLE	215107-008	784781	11.03	1268015	12.19	1020782	16.08	506210	18.79
020	SAMPLE	215107-010	784513	11.02	1253216	12.18	1014961	16.09	500974	18.79
021	MS	QC514602	813478	11.03	1319340	12.19	1054743	16.09	525594	18.79
022	MSD	QC514603	823887	11.03	1350004	12.19	1083480	16.09	540870	18.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839395033

Date : 10/01/09 Reference : kif12
Sequence : MSVOA11 kj1 Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
005	CCV/LCS	QC514547	1499027	10.81	2620282	11.74	2792205	14.82	962810	17.10
007	BLANK	QC514548	1411294	10.81	2542097	11.74	2732861	14.82	924774	17.10
008	SAMPLE	215263-011	1387491	10.81	2512625	11.74	2688943	14.82	866080	17.10
009	SAMPLE	215263-001	1361376	10.82	2478125	11.74	2656757	14.83	849918	17.10
010	SAMPLE	215263-002	1342470	10.82	2459060	11.74	2638811	14.82	855085	17.10
011	MSS	215263-004	1302920	10.81	2384393	11.74	2561924	14.83	859524	17.10
012	SAMPLE	215263-005	1290610	10.81	2387311	11.74	2566716	14.82	851780	17.10
013	SAMPLE	215263-007	1265560	10.81	2330282	11.74	2541115	14.83	805740	17.10
014	SAMPLE	215263-008	1231334	10.81	2253145	11.74	2466115	14.82	789586	17.10
015	SAMPLE	215263-006	1214654	10.81	2259144	11.74	2466528	14.82	815993	17.10
016	SAMPLE	215263-009	1227316	10.81	2288176	11.74	2460714	14.83	789943	17.10
017	SAMPLE	215263-010	1207010	10.81	2237099	11.74	2448754	14.83	808916	17.10
018	MS	QC514583	1262587	10.81	2300546	11.74	2569062	14.82	916548	17.10
019	MSD	QC514584	1298809	10.81	2340232	11.74	2610740	14.82	930752	17.10
020	SAMPLE	215263-009	1309488	10.82	2400635	11.74	2607695	14.83	859246	17.10
021	SAMPLE	215263-010	1276864	10.82	2348379	11.74	2567354	14.83	857278	17.10
022	SAMPLE	215104-001	1237017	10.81	2273611	11.74	2496897	14.83	799770	17.10
023	SAMPLE	215106-001	1203134	10.81	2230798	11.74	2480941	14.83	788317	17.10
024	SAMPLE	215106-002	1223536	10.81	2260803	11.74	2490407	14.83	803283	17.10
025	SAMPLE	215106-003	1210415	10.81	2233484	11.74	2459602	14.82	811379	17.10
026	SAMPLE	215071-009	1170240	10.81	2181682	11.74	2394382	14.83	756574	17.10
027	SAMPLE	215104-002	1189351	10.81	2207125	11.74	2448253	14.83	792917	17.10
028	SAMPLE	215104-003	1197929	10.81	2244707	11.74	2483327	14.82	796013	17.10
029	SAMPLE	215104-004	1201033	10.81	2224189	11.74	2472584	14.82	826504	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469393599

Instrument : MSVOA07 Begun : 09/30/09 07:59
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	giu01	X	IB			09/30/09 07:59	1.0	1	
002	giu02	X	IB			09/30/09 08:36	1.0	1	
003	giu03	X	IB			09/30/09 09:07	1.0	1	
004	giu04	X	BFB			09/30/09 09:55	1.0	2	
005	giu05	X	BFB			09/30/09 10:09	1.0	2	
006	giu06	TUN	BFB			09/30/09 10:27	1.0	2	
007	giu07	IB	CALIB IB			09/30/09 10:39	1.0	1	
008	giu08	ICAL	.25/.5PPB			09/30/09 11:10	1.0	3 4 5 6 1	
009	giu09	ICAL	0.5/1PPB			09/30/09 11:40	1.0	3 4 5 6 1	
010	giu10	ICAL	2PPB			09/30/09 12:11	1.0	3 4 5 6 1	
011	giu11	ICAL	5PPB			09/30/09 12:41	1.0	3 4 5 6 1	
012	giu12	ICAL	10PPB			09/30/09 13:12	1.0	3 4 5 6 1	
013	giu13	ICAL	20PPB			09/30/09 13:43	1.0	7 8 9 10 1	
014	giu14	ICAL	50PPB			09/30/09 14:13	1.0	7 8 9 10 1	
015	giu15	X	75PPB			09/30/09 14:44	1.0	7 8 9 10 1	
016	giu16	ICAL	100PPB			09/30/09 15:15	1.0	7 8 9 10 1	
017	giu17	X	25PPB			09/30/09 15:45	1.0	11 1	
018	giu18	X	25PPB			09/30/09 16:16	1.0	12 13 14 1	
019	giu19	X	IB			09/30/09 17:08	1.0	1	
020	giu20	ICAL	75PPB			09/30/09 17:48	1.0	7 8 9 10 1	
021	giu21	X	25PPB			09/30/09 18:31	1.0	11 1	
022	giu22	X	25PPB			09/30/09 19:02	1.0	12 15 14 1	
023	giu23	TUN	BFB			09/30/09 19:47	1.0	2	
024	giu24	CCV				09/30/09 20:13	1.0	7 8 10 9 1	
025	giu25	ICV/LCS	QC514490	Water	155514	09/30/09 20:44	1.0	12 16 15 17 1	
026	giu26	X	IB			09/30/09 21:14	1.0	1	
027	giu27	BLANK	QC514489	Water	155514	09/30/09 21:45	1.0	1	
028	giu28	SAMPLE	215071-001	Water	155514	09/30/09 22:16	1.0	1	
029	giu29	SAMPLE	215071-010	Water	155514	09/30/09 22:46	1.0	1	headspace <= 1 mL
030	giu30	SAMPLE	215010-010	Water	155514	09/30/09 23:17	1.0	1	
031	giu31	SAMPLE	215072-012	Water	155514	09/30/09 23:48	1.0	1	
032	giu32	SAMPLE	215071-002	Water	155514	10/01/09 00:18	1.0	1	
033	giu33	SAMPLE	215071-003	Water	155514	10/01/09 00:49	1.0	1	
034	giu34	SAMPLE	215071-004	Water	155514	10/01/09 01:20	1.0	1	
035	giu35	SAMPLE	215071-005	Water	155514	10/01/09 01:50	1.0	1	
036	giu36	SAMPLE	215071-007	Water	155514	10/01/09 02:21	1.0	1	headspace <= 1 mL
037	giu37	SAMPLE	215071-011	Water	155514	10/01/09 02:52	1.0	1	
038	giu38	SAMPLE	215071-012	Water	155514	10/01/09 03:22	1.0	1	
039	giu39	SAMPLE	215178-001	Water	155514	10/01/09 03:53	1.0	1	
040	giu40	SAMPLE	215178-002	Water	155514	10/01/09 04:24	1.0	1	2:ISOPROH=5300
041	giu41	SAMPLE	215178-003	Water	155514	10/01/09 04:55	1.0	1	
042	giu42	SAMPLE	215071-006	Water	155514	10/01/09 05:25	4.0	1	
043	giu43	MSS	215071-013	Water	155514	10/01/09 05:56	4.0	1	
044	giu44	SAMPLE	215071-008	Water	155514	10/01/09 06:27	50.0	1	
045	giu45	MS	QC514491	Water	155514	10/01/09 06:57	4.0	12 16 15 17 1	
046	giu46	MSD	QC514492	Water	155514	10/01/09 07:28	4.0	12 16 15 17 1	
047	giu47	X	IB			10/01/09 07:59	1.0	1	
048	giu48	X	IB			10/01/09 08:30	1.0	1	
049	giu49	X	IB			10/01/09 09:00	1.0	1	

TEW 09/30/09 : Tune was adjusted by BO prior to file giu06.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469393599

Instrument : MSVOA07 Begun : 09/30/09 07:59
Method : EPA 8260B SOP Version : TVH_8260B_rv0

TEW 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

TEW 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 23 through 49.

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S12921 2=S12404 3=S13034 4=S13036 5=S13035 6=S13033 7=S12998 8=S13032 9=S12565 10=S12929 11=S12924 12=S12996 13=S129693 14=S12845 15=S12693 16=S13055 17=S12925

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469395137

Instrument : MSVOA07 Begun : 10/01/09 09:37
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	gj101	TUN	BFB			10/01/09 09:37	1.0	1	
002	gj102	X				10/01/09 10:03	1.0	2 3 4 5 6	
003	gj103	CCV				10/01/09 10:46	1.0	7 8 9 10 6	
004	gj104	X	QC514566	Water	155528	10/01/09 11:17	1.0	7 8 9 10 6	
005	gj105	X	IB			10/01/09 11:47	1.0	6	
006	gj106	BLANK	QC514564	Water	155528	10/01/09 12:18	1.0	6	
007	gj107	SAMPLE	215064-004	Water	155528	10/01/09 12:49	1.0	6	
008	gj108	SAMPLE	215064-005	Water	155528	10/01/09 13:19	1.0	6	
009	gj109	SAMPLE	215072-007	Water	155528	10/01/09 13:57	3.333	6	
010	gj110	SAMPLE	215072-006	Water	155528	10/01/09 14:28	5.0	6	
011	gj111	TUN	BFB			10/01/09 15:05	1.0	1	
012	gj112	X				10/01/09 15:30	1.0	2 3 4 5 6	
013	gj113	CCV/BS	QC514565	Water	155528	10/01/09 16:14	1.0	7 8 9 10 6	
014	gj114	BSD	QC514566	Water	155528	10/01/09 16:44	1.0	7 8 9 10 6	
015	gj115	X	IB			10/01/09 17:27	1.0	6	
016	gj116	BLANK	QC514686	Water	155528	10/01/09 17:58	1.0	6	
017	gj117	SAMPLE	215097-002	Water	155528	10/01/09 18:28	1.0	6	headspace <= 1 mL
018	gj118	SAMPLE	215159-011	Water	155528	10/01/09 18:59	1.0	6	
019	gj119	SAMPLE	215071-013	Water	155528	10/01/09 19:30	1.0	6	
020	gj120	SAMPLE	215159-001	Water	155528	10/01/09 20:01	1.0	6	
021	gj121	SAMPLE	215159-002	Water	155528	10/01/09 20:31	1.0	6	
022	gj122	SAMPLE	215159-003	Water	155528	10/01/09 21:02	1.0	6	
023	gj123	SAMPLE	215159-005	Water	155528	10/01/09 21:32	1.0	6	
024	gj124	SAMPLE	215159-006	Water	155528	10/01/09 22:03	1.0	6	
025	gj125	SAMPLE	215159-007	Water	155528	10/01/09 22:34	1.0	6	
026	gj126	SAMPLE	215159-008	Water	155528	10/01/09 23:05	1.0	6	
027	gj127	SAMPLE	215159-010	Water	155528	10/01/09 23:35	1.0	6	
028	gj128	SAMPLE	215173-001	Water	155528	10/02/09 00:06	1.0	6	
029	gj129	SAMPLE	215173-002	Water	155528	10/02/09 00:37	1.0	6	
030	gj130	SAMPLE	215173-003	Water	155528	10/02/09 01:07	1.0	6	
031	gj131	SAMPLE	215159-004	Water	155528	10/02/09 01:38	3.333	6	
032	gj132	SAMPLE	215159-009	Water	155528	10/02/09 02:09	5.0	6	
033	gj133	X	IB			10/02/09 02:40	1.0	6	
034	gj134	X	IB			10/02/09 03:10	1.0	6	
035	gj135	X	IB			10/02/09 03:41	1.0	6	

TEW 10/01/09 : Different aliquot of S12996 used for second set of BS/BSD.

DNT 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 35.

DNT 10/02/09 : Matrix spikes were not performed for this analysis in batch 155528 due to insufficient sample amount.

Analyst: DNT Date: 10/02/09 Reviewer: LW Date: 10/02/09

Standards used: 1=S12404 2=S12998 3=S13032 4=S12929 5=S12565 6=S12921 7=S12996 8=S13055 9=S12693 10=S12925

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499361940

Instrument : MSVOA10 Begun : 09/08/09 08:20
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji801	X	IB			09/08/09 08:20	1.0	1	
002	ji802	X	IB			09/08/09 08:54	1.0	1	
003	ji803	X	IB			09/08/09 12:48	1.0	1	
004	ji804	X	LOW PT			09/08/09 13:23	1.0	1	
005	ji805	X	IB			09/08/09 16:27	1.0	1	
006	ji806	X	LOW PT			09/08/09 17:01	1.0	1	
007	ji807	TUN	BFB			09/08/09 18:22	1.0	2	
008	ji808	TUN	BFB			09/09/09 00:19	1.0	2	
009	ji809	X	IB BAKE			09/09/09 00:42	1.0	1	
010	ji810	X	IB			09/09/09 01:33	1.0	1	
011	ji811	IB	CALIB IB			09/09/09 02:08	1.0	1	
012	ji812	ICAL	.25/0.5PPB			09/09/09 02:42	1.0	3 4 5 6 1	
013	ji813	ICAL	0.5/1PPB			09/09/09 03:16	1.0	3 4 5 6 1	
014	ji814	ICAL	2PPB			09/09/09 03:51	1.0	3 4 5 6 1	
015	ji815	ICAL	5PPB			09/09/09 04:25	1.0	3 4 5 6 1	
016	ji816	ICAL	10PPB			09/09/09 04:59	1.0	3 4 5 6 1	
017	ji817	ICAL	20PPB			09/09/09 05:34	1.0	3 4 5 6 1	
018	ji818	ICAL	50PPB			09/09/09 06:08	1.0	3 4 5 6 1	
019	ji819	ICAL	75PPB			09/09/09 06:42	1.0	3 4 5 6 1	
020	ji820	ICAL	100PPB			09/09/09 07:17	1.0	3 4 5 6 1	

BO 09/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

Standards used: 1=S12692 2=S12404 3=S12733 4=S12773 5=S12217 6=S12685

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499363592

Instrument : MSVOA10 Begun : 09/09/09 11:52
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji901	X	BFB			09/09/09 11:52	1.0	1	
002	ji902	X	BFB			09/09/09 12:05	1.0	1	
003	ji903	X	BFB			09/09/09 12:25	1.0	1	
004	ji904	X	BFB			09/09/09 13:31	1.0	1	
005	ji905	X	20PPB			09/09/09 14:02	1.0	2 3 4 5 6	
006	ji906	TUN	BFB			09/09/09 14:47	1.0	1	
007	ji907	CCV	20PPB			09/09/09 15:04	1.0	2 3 4 5 6	
008	ji908	ICV/BS	QC511299	Water	154716	09/09/09 16:12	1.0	7 8 9 10 6	
009	ji909	X	QC511300	Water	154716	09/09/09 16:47	1.0	7 8 9 10 6	
010	ji910	X	IB			09/09/09 17:20	1.0	6	
011	ji911	BSD	QC511300	Water	154716	09/09/09 17:55	1.0	6 7 8 9 10	
012	ji912	X	IB			09/09/09 18:28	1.0	6	
013	ji913	BLANK	QC511301	Water	154716	09/09/09 19:03	1.0	6	
014	ji914	SAMPLE	214564-003	Water	154716	09/09/09 19:37	1.0	6	
015	ji915	SAMPLE	214552-017	Water	154716	09/09/09 20:11	1.0	6	
016	ji916	SAMPLE	214664-001	Water	154716	09/09/09 20:45	1.0	6	
017	ji917	SAMPLE	214574-008	Water	154716	09/09/09 21:19	1.0	6	
018	ji918	SAMPLE	214574-007	Water	154716	09/09/09 21:53	1.0	6	
019	ji919	SAMPLE	214574-009	Water	154716	09/09/09 22:27	1.0	6	
020	ji920	SAMPLE	214574-010	Water	154716	09/09/09 23:01	1.0	6	
021	ji921	SAMPLE	214574-011	Water	154716	09/09/09 23:35	1.0	6	
022	ji922	SAMPLE	214574-001	Water	154716	09/10/09 00:09	4.0	6	
023	ji923	MSS	214574-002	Water	154716	09/10/09 00:43	14.29	6	
024	ji924	SAMPLE	214564-002	Water	154716	09/10/09 01:17	6.25	6	
025	ji925	MS	QC511345	Water	154716	09/10/09 01:51	14.29	6 7 8 9 10	
026	ji926	MSD	QC511346	Water	154716	09/10/09 02:25	14.29	6 7 8 9 10	
027	ji927	X	IB			09/10/09 02:59	1.0	6	
028	ji928	X	IB			09/10/09 03:33	1.0	6	
029	ji929	X	IB			09/10/09 04:07	1.0	6	
030	ji930	X	IB			09/10/09 04:42	1.0	6	
031	ji931	X	IB			09/10/09 05:16	1.0	6	

BO 09/09/09 : ji903, ji906, adjusted tune

HDD 09/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

HDD 09/10/09 : MSS over dilute,MS/MSD not used

LW 09/11/09 : Matrix spikes QC511345,QC511346 (batch 154716) were not reported because the parent sample was reanalyzed in another batch.

Analyst: HDD Date: 09/10/09 Reviewer: LW Date: 09/11/09

Standards used: 1=S12404 2=S12733 3=S12773 4=S12217 5=S12685 6=S12692 7=S12922 8=S12589 9=S12693 10=S12845

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499395015

Instrument : MSVOA10 Begun : 10/01/09 07:35
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jj101	X	IB			10/01/09 07:35	1.0	1	
002	jj102	TUN	BFB			10/01/09 08:24	1.0	2	
003	jj103	CCV/BS	QC514544	Water	155522	10/01/09 08:41	1.0	3 4 5 6 1	
004	jj104	BSD	QC514545	Water	155522	10/01/09 09:26	1.0	3 4 5 6 1	
005	jj105	X	IB			10/01/09 10:01	1.0	1	
006	jj106	BLANK	QC514546	Water	155522	10/01/09 10:35	1.0	1	
007	jj107	SAMPLE	215107-004	Water	155522	10/01/09 11:10	1.0	1	
008	jj108	SAMPLE	215107-005	Water	155522	10/01/09 11:44	1.0	1	
009	jj109	SAMPLE	215146-001	Water	155522	10/01/09 12:18	1.0	1	
010	jj110	SAMPLE	215147-001	Water	155522	10/01/09 12:52	1.0	1	
011	jj111	SAMPLE	215107-001	Water	155522	10/01/09 13:27	1.0	1	
012	jj112	SAMPLE	215107-002	Water	155522	10/01/09 14:01	1.0	1	
013	jj113	SAMPLE	215107-003	Water	155522	10/01/09 14:35	1.0	1	2:TCE=150
014	jj114	SAMPLE	215098-001	Water	155522	10/01/09 15:09	1.0	1	
015	jj115	SAMPLE	215071-007	Water	155522	10/01/09 15:43	1.0	1	headspace <= 1 mL
016	jj116	MSS	215107-009	Water	155522	10/01/09 16:17	33.33	1	2:PCE=120
017	jj117	SAMPLE	215107-006	Water	155522	10/01/09 16:51	100.0	1	
018	jj118	SAMPLE	215107-007	Water	155522	10/01/09 17:26	100.0	1	
019	jj119	SAMPLE	215107-008	Water	155522	10/01/09 18:00	100.0	1	
020	jj120	SAMPLE	215107-010	Water	155522	10/01/09 18:33	166.7	1	
021	jj121	MS	QC514602	Water	155522	10/01/09 19:07	33.33	3 4 5 6 1	2:PCE=160
022	jj122	MSD	QC514603	Water	155522	10/01/09 19:41	33.33	3 4 5 6 1	2:PCE=150
023	jj123	X	IB			10/01/09 20:15	1.0	1	
024	jj124	X	IB			10/01/09 20:49	1.0	1	
025	jj125	X	IB			10/01/09 21:23	1.0	1	

TEW 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 10.

MJD 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 22.

Analyst: MJD Date: 10/02/09 Reviewer: LW Date: 10/02/09

Standards used: 1=S13008 2=S12404 3=S12924 4=S12996 5=S12693 6=S12845

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839395033

Instrument : MSVOA11 Begun : 10/01/09 07:53
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kj101	X	IB			10/01/09 07:53	1.0	1	
002	kj102	X	BFB			10/01/09 08:29	1.0	2	
003	kj103	X	QC514547	Water	155523	10/01/09 08:42	1.0	3 4 5 6 1	
004	kj104	TUN	BFB			10/01/09 09:10	1.0	2	
005	kj105	CCV/LCS	QC514547	Water	155523	10/01/09 09:23	1.0	3 4 5 6 1	
006	kj106	X	IB			10/01/09 10:03	1.0	1	
007	kj107	BLANK	QC514548	Water	155523	10/01/09 10:31	1.0	1	
008	kj108	SAMPLE	215263-011	Water	155523	10/01/09 10:59	1.0	1	
009	kj109	SAMPLE	215263-001	Water	155523	10/01/09 11:28	100.0	1	pH > 2
010	kj110	SAMPLE	215263-002	Water	155523	10/01/09 11:56	100.0	1	pH > 2
011	kj111	MSS	215263-004	Water	155523	10/01/09 12:24	100.0	1	pH > 2
012	kj112	SAMPLE	215263-005	Water	155523	10/01/09 12:53	200.0	1	pH > 2
013	kj113	SAMPLE	215263-007	Water	155523	10/01/09 13:21	200.0	1	pH > 2
014	kj114	SAMPLE	215263-008	Water	155523	10/01/09 13:49	200.0	1	pH > 2
015	kj115	SAMPLE	215263-006	Water	155523	10/01/09 14:18	333.3	1	headspace <= 1 mL, pH > 2
016	kj116	SAMPLE	215263-009	Water	155523	10/01/09 14:46	1.0	1	pH > 2, 1:ACE=110
017	kj117	SAMPLE	215263-010	Water	155523	10/01/09 15:14	1.0	1	pH > 2, 1:ACE=120
018	kj118	MS	QC514583	Water	155523	10/01/09 15:42	100.0	1 3 4 5 6	
019	kj119	MSD	QC514584	Water	155523	10/01/09 16:11	100.0	1 3 4 5 6	
020	kj120	SAMPLE	215263-009	Water	155523	10/01/09 16:39	5.0	1	
021	kj121	SAMPLE	215263-010	Water	155523	10/01/09 17:07	3.333	1	pH > 2
022	kj122	SAMPLE	215104-001	Water	155523	10/01/09 17:36	1.0	1	
023	kj123	SAMPLE	215106-001	Water	155523	10/01/09 18:04	1.0	1	
024	kj124	SAMPLE	215106-002	Water	155523	10/01/09 18:32	1.0	1	
025	kj125	SAMPLE	215106-003	Water	155523	10/01/09 19:01	1.0	1	
026	kj126	SAMPLE	215071-009	Water	155523	10/01/09 19:29	1.0	1	
027	kj127	SAMPLE	215104-002	Water	155523	10/01/09 19:57	100.0	1	
028	kj128	SAMPLE	215104-003	Water	155523	10/01/09 20:25	100.0	1	
029	kj129	SAMPLE	215104-004	Water	155523	10/01/09 20:54	20.0	1	
030	kj130	X	IB			10/01/09 21:22	1.0	1	
031	kj131	X	IB			10/01/09 21:50	1.0	1	
032	kj132	X	IB			10/01/09 22:22	1.0	1	
033	kj133	X	IB			10/01/09 22:50	1.0	1	
034	kj134	X	IB			10/01/09 23:19	1.0	1	

DNT 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 34.

Analyst: DNT Date: 10/02/09 Reviewer: LW Date: 10/02/09

Standards used: 1=S12947 2=S12404 3=S12996 4=S12845 5=S12693 6=S12924

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GC/MS VOLATILE ORGANICS

Batch #: 155514

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215010-10	A	<2				7	1x	TEW 9-30-09
2	215072-12				7			1x	
3	215071-1			LV	7			TB	
4	-2							1x	
5	-3								
6	-4	B							
7	-5								
8	-6	A	<2			11		4x	
9	-7			Bubble <1mL				1x	
10	-8	B				12		50x	
11	-10	A		Bubble <1mL				TB	
12	-11							1x	
13	-12								
14	-13		<2			13		4x MSS	
15	215178-1	B						1x	
16	-2								
17	-3								
18	MS/MSD	A	<2					4x	
19									
20									
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GC/MS VOLATILE ORGANICS

Batch #: 155522

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215107-1	B	<2				10	1x	ZW 10/1/09
2	-2								
3	-3								
4	-4							TB	
5	-5							EB	
6	-6	A	<2			2		100x	
7	-7	B				3			
8	-8					4			
9	-9					68		33.3x MSS	
10	-10				N/10/11	76		166.7x	
11	MS/MSD					[redacted]		33.3x	
12	215098-1	A	<2					1x	
13	~~215178-1~~	~~C~~						~~RR e 1x~~	
14	~~-2~~							~~7.14x~~	
15	~~-3~~							~~1x~~	
16	215146-1	A	<2					TB RUSH 10/1	TEW 10-1-09
17	215147-1							TB	
18	215071-7	B		Bubble <1mL				RR e 1x Chloroethane hit w/ ct	
19									
20									
21									
22									
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GC/MS VOLATILE ORGANICS

Batch #: 155523

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215263 - 1	B	2.56			2	11	100x Dark color Foam hold vol1 pH meter	20 10/1/09
2	- 2		2.59			3		100x	
3	- 4		5			4		100x MS	
4	- 4							100x MS/MSD	
5	- 5		2.5			6		200x	
6	- 6		9	1/2 mL		7		333x	
7	- 7					8		200x	
8	- 8		13			9		200x	
9	- 9	7/10/11 C	2.5 ~~X2~~		10/11	~~10~~		~~5x~~ 1x 20	
10	- 10	B	2.5			~~11~~		~~5x~~ 1x 10/1	
11	- 11	A	<2	LV				TB	
12	215071 - 9							1X	
13	215097 - 1							1X PUT OFF	
14	- 2			LV				1X TB	
15	215104 - 1		<2					TB	
16	- 2	B	<2			12		100x FOAM	
17	- 3					13		100x	
18	- 4					14		20x	
19	215106 - 1	B	<2					1x	
20	- 2								
21	- 3								
22	215263-009	B	<2			10		RR >LR acetone @5X	
23	10	C	2.5			11		RR >LR acetone @3.33X	
24									
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GC/MS VOLATILE ORGANICS Batch #: 155528 **Water Sample Prep Sheet**

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215071 ~~-8~~	~~C~~				2	7	RRe ~~20x AD~~ Report 1st run. Hold 10/2	ve 10/1/09
2	↓ -13	B	<2					1x ↓	
3	215072 -6	↓	<2			3		5x ↓ TCE @ 62PPB Hold 10/1	
4	↓ -7	↓	↓			4		3.33x hits w/ CT ↓	
5	~~215071 -7~~	—	—					~~1x Clethane hit w/ CT~~	
6	215064-4	C	<2					RRe 1x ccv↑ w/ hits Hold 10/1	
7	↓ -5	E						↓ 1x ↓	
8	215159-1	D						1x	
9	-2	A						↓	
10	-3	E	↓					↓	
11	-4	D	<2			6		3.33x	
12	-5	A						1x	
13	-6	D							
14	-7	A							
15	-8	↓	↓					↓	
16	-9	E	<2			7		5x FOAM	
17	-10	B						1x	
18	215173-1	E							
19	-2								
20	↓ -3	↓						↓	
21	215159-11	A						↓	
22	215097-2	↓	↓	Bubble <1mL			↓	TB	↓
23									
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Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 215072
ANALYTICAL REPORT

CH2M Hill	Project : 371016.SH.60.61.QS
2625 South Plaza Drive	Location : Quarterly UST
Tempe, AZ 85282-3397	Level : III

Sample ID	Lab ID
TB-091709A	215072-001
ASE-73B-9C1	215072-002
ASE-73C-9C1	215072-003
ASE-72A-9C1	215072-004
ASE-72B-9C1	215072-005
PL-528-9C1	215072-006
ASE-116A-9C1	215072-007
ASE-38A-9C1	215072-008
PL-530-9C1	215072-009
ASE-49B-9C1	215072-010
PZ-1B-9C1	215072-011
PZ-1A-9C1	215072-012

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 10/09/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215072**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/21/09**
Samples Received:	**09/19/09**

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 09/21/09. See attached cooler receipt form for any sample receipt problems or discrepancies.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 09/09/09 02:42; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for acetone in the ICV analyzed 09/09/09 16:12; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". High responses were observed for many analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for many analytes in the CCV analyzed 09/30/09 11:57; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for bromomethane in the CCV analyzed 09/30/09 11:33; this analyte met minimum response criteria, and affected data was qualified with "b". High responses were observed for a number of analytes; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High response was observed for chloroethane in the CCV analyzed 10/01/09 10:46; this analyte was not detected at or above the RL in the associated samples.

High response was observed for chloroethane in the CCV analyzed 09/30/09 20:13; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for iodomethane and vinyl acetate in the CCV analyzed 10/01/09 16:14; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for chloroethane; affected data was qualified with "b".

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215072**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/21/09**
Samples Received:	**09/19/09**

Volatile Organics by GC/MS (EPA 8260B):

High recoveries were observed for a number of analytes in the LCS for batch 155470; these analytes were not detected at or above the RL in the associated sample.

Low recoveries were observed for sec-butylbenzene and benzene in the MSD of ASE-108A-9C1 (lab # 215064-005); the LCS was within limits, and the associated RPDs were within limits. High recoveries were observed for a number of analytes in the MS/MSD of ASE-108A-9C1 (lab # 215064-005); the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample.

High recoveries were observed for a number of analytes in the BS/BSD for batch 155479; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

Low recovery was observed for trichloroethene in the MSD of ASE-73C-9C1 (lab # 215072-003); the BS/BSD were within limits. High recoveries were observed for many analytes in the MS/MSD of ASE-73C-9C1 (lab # 215072-003); the associated RPDs were within limits.

High recovery was observed for naphthalene in the LCS for batch 155514; this analyte was not detected at or above the RL in the associated sample.

Low recovery was observed for iodomethane in the MS of PL-532-9C1 (lab # 215071-013); the LCS was within limits, and the associated RPD was within limits.

Low recovery was observed for iodomethane in the BS for batch 155528; the associated RPD was within limits.

Responses exceeding the instrument's linear range were observed for trichloroethene in the MS/MSD of ASE-73C-9C1 (lab # 215072-003); affected data was qualified with "b".

No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**215072**
Client:	**CH2M Hill**
Project:	**371016.SH.60.61.QS**
Location:	**Quarterly UST**
Request Date:	**09/21/09**
Samples Received:	**09/19/09**

Metals (EPA 6010B, EPA 6020, and EPA 7470A) Water:
High % difference was observed for manganese in the serial dilution of ASE-72B-9C1 (lab # 215072-005).

No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:
High recovery was observed for selenium in the post digest spike for batch 155517; the parent sample was not a project sample, and the BS/BSD were within limits.

Low recoveries were observed for a number of analytes in the MS/MSD for batch 155517; the parent sample was not a project sample, and the associated RPDs were within limits. High recoveries were observed for vanadium; the BS/BSD were within limits, and the associated RPD was within limits.

Responses exceeding the instrument's linear range were observed for calcium and magnesium in the MSD for batch 155517.

High % differences were observed for copper and iron in the serial dilution for batch 155517.

Calcium was detected above the RL in the method blank for batch 155517; this analyte was detected in samples at a level at least 10 times that of the blank.

No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
Nitrogen, nitrate was received and analyzed outside of hold time; affected data was qualified with "b".

No other analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Chain of Custody

215072

Curtis & Tompkins Laboratories
2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	40060.70532		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	CTBERK		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Privileged & Confidential

Site Name:	Sky Harbor	Phase:	
Location of Site:	Phoenix, AZ	Sampling Program	Quarterly UST

Sampling Co.:	H+A	EDD To:	Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)		Sampler:	M. Wise - D. Foehr - J. Ventes
CH2M HILL		PO #	5101516
2625 South Plaza Drive, Suite 300		Analysis Turnaround Time (TAT):	14
Tempe, AZ 85282		Consultant	
Preliminary Data To	Jennifer Peterson, CH2M HILL		
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL		
Hard Copy To	Jennifer Peterson, CH2M HILL	Full Report TAT:	14
Invoice To:	Honeywell/Copy J Peterson		

Preservative

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	VOCs (SW8260B)	TPH - DRO, ORO (SW8015B)	1,4-Dioxane (SW8270SIM)	Alkalinity (E310.1)	~~Chloride, Fluoride, Nitrate, Sulfate~~ (E300.0) Arsenic	ICP Metals (SW6010B/SW6020/SW7470A) Total (0.5 ppm)	Hexavalent Chromium (SW7196A)	Total Nickel (SW6010)	Dissolved Nickel - Field Filtered (SW6010)	Total Chromium (SW6010)	Dissolved Chromium - Field Filtered (SW6010)		MS/MSD	Sampling Method (code)	Lab Sample Numbers
	Sample Identification										Units																
1	ASE-73B	--	--	TB-091709A	9.17.09	0600	BLKWATR	WATR	TB	1			X														
2	ASE-73B	--	153	ASE-73B-9C1		0636	GW	WATR	Reg	3			X														
3	ASE-73C	--	190	ASE-73C-9C1		0822	GW	WATR	Reg	9			X												X		
4	ASE-72A	--	98	ASE-72A-9C1		0906	GW	WATR	Reg	3			X														
5	ASE-72B	--	138	ASE-72B-9C1		0940	GW	WATR	Reg	8			X		X	X	X	X									
6	ASE-72B	--	--	PL-528-9C1		0950	GW	WATR	Reg	3			X														
7	ASE-116A	--	103	ASE-116A-9C1		1341	GW	WATR	Reg	4			X	X													
8	ASE-38A	--	112	ASE-38A-9C1		1427	GW	WATR	Reg	4			X	X													
9	ASE-38A	--	--	PL-530-9C1		1440	BLKWATR	WATR	EB	4			X	X													
10	ASE-49B	--	100	ASE-49B-9C1		1055	GW	WATR	Reg	8			X		X	X	X	X									
11	PZ-1B	--	123	PZ-1B-9C1		1155	GW	WATR	Reg	8			X		X	X	X	X									
12	PZ-1A	--	74	PZ-1A-9C1		1225	GW	WATR	Reg	3			X														

Relinquished by	Company	H+A	Received by	Company	FED EX	Condition		Custody Seals Intact	
	Date/Time	09/18/09 17:00		Date/Time	09/18/09 17:00	Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time	9/21/09	Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 215072 Date Received 9/19/09 Number of coolers 1
Client Ch2m Hill Project Sky Harbor

Date Opened 9/19/09 By (print) Ricky Grams (sign) [signature]
Date Logged in 9/22/9 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
   Shipping info Ch2m Hill Mike Weise 2625 S Plaza Dr Tempe AZ Fedex

2A. Were custody seals present? ... ☒ YES (circle) on cooler on samples ☐ NO
   How many 1 Name [illegible] Date 9/18/09
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

   ☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4

   ☐ Samples Received on ice & cold without a temperature blank

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
   If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 215072

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	09/17/09
Units:	ug/L	Received:	09/19/09
Diln Fac:	1.000	Prepared:	09/23/09
Batch#:	155240	Analyzed:	09/28/09

Field ID: ASE-116A-9C1 Lab ID: 215072-007
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,500 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	107	50-120	

Field ID: ASE-38A-9C1 Lab ID: 215072-008
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Field ID: PL-530-9C1 Lab ID: 215072-009
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

Type: BLANK Lab ID: QC513380

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513381	Batch#:	155240
Matrix:	Water	Prepared:	09/23/09
Units:	ug/L	Analyzed:	09/28/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,133	85	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-108A-9C1	Batch#:	155240
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Prepared:	09/23/09
Diln Fac:	1.000	Analyzed:	09/28/09

Type: MS Lab ID: QC513382

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	1,887	2,500	4,304	97	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Type: MSD Lab ID: QC513383

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	4,293	96	54-120	0	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

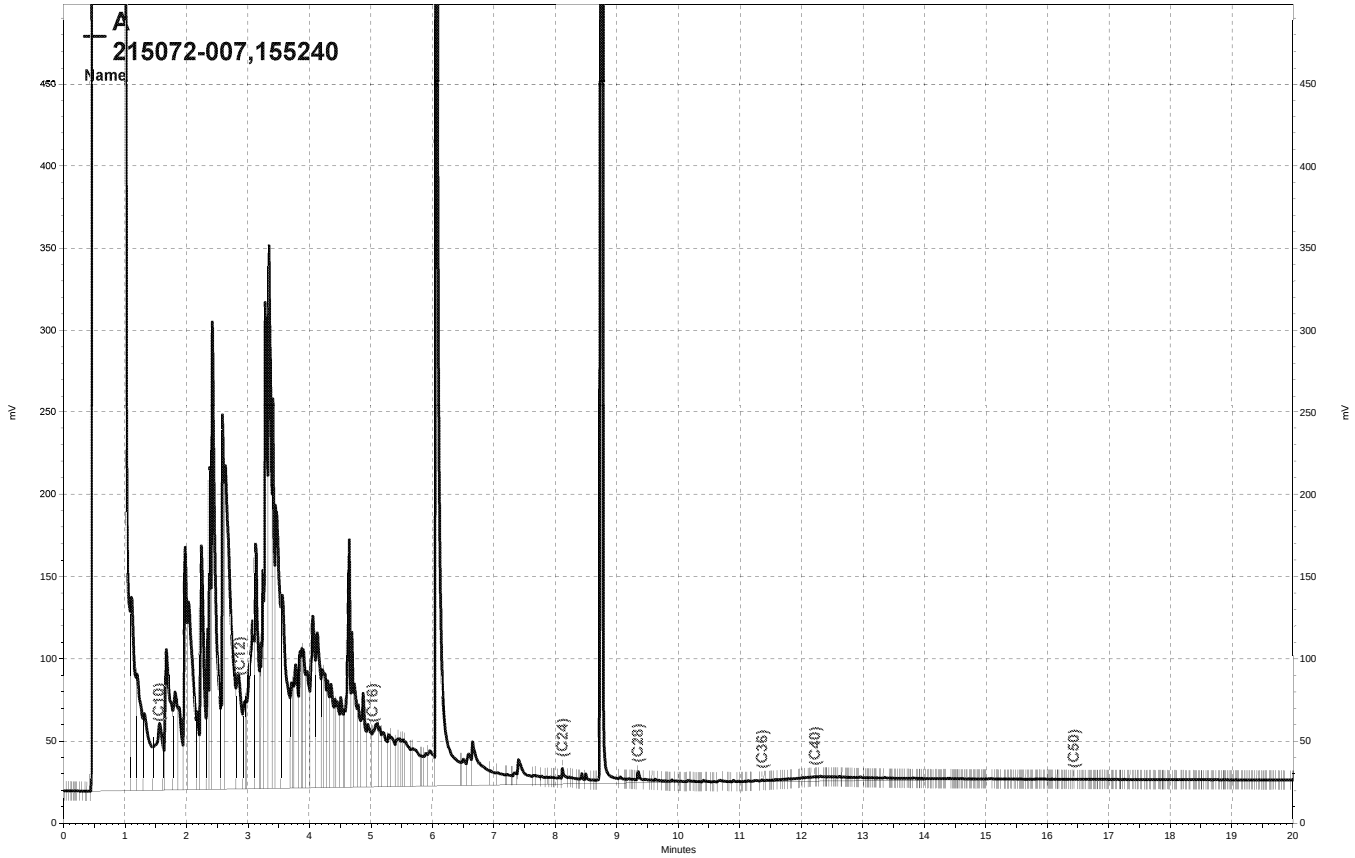
Batch QC Report

Total Extractable Hydrocarbons

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513384	Batch#:	155240
Matrix:	Water	Prepared:	09/23/09
Units:	ug/L	Analyzed:	09/28/09

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	3,164	127	70-128	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	



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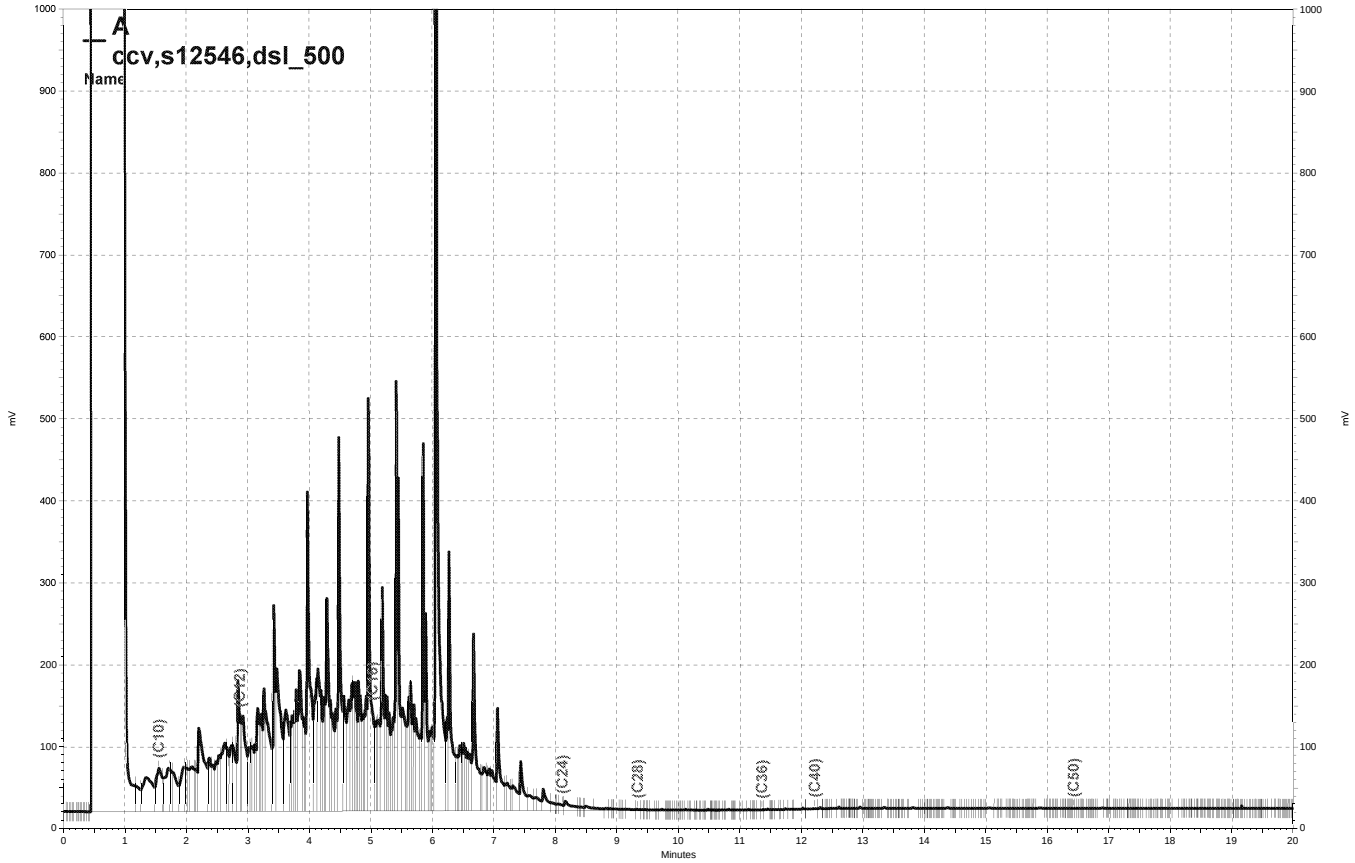

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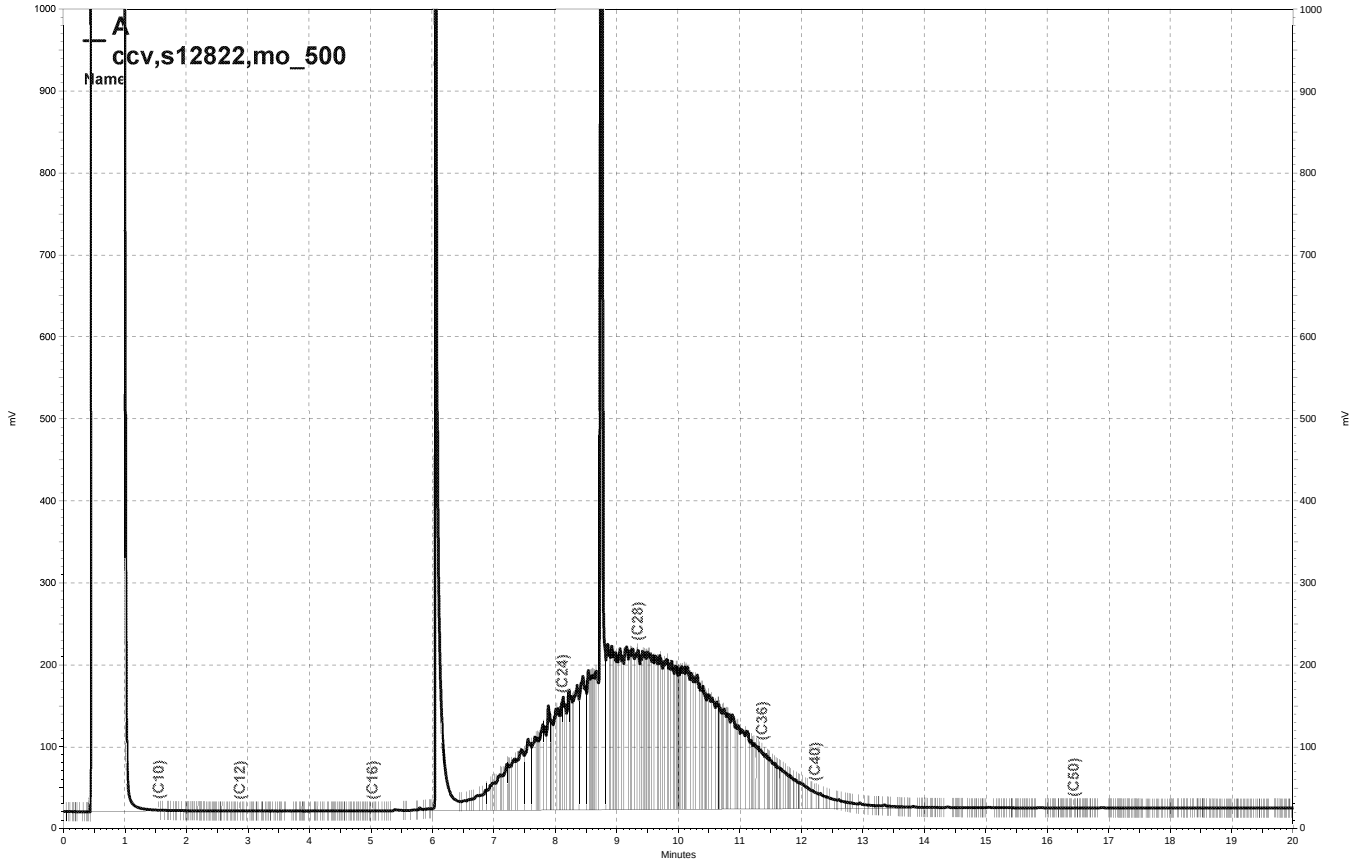

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CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179150420002
Units : mg/L

Name : DSL_104
Date : 14-APR-2009 20:09
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	104a020	179150420020	DSL_10	14-APR-2009 20:09	S10988
L2	104a021	179150420021	DSL_100	14-APR-2009 20:37	S10989
L3	104a022	179150420022	DSL_500	14-APR-2009 21:04	S10987 (10X)
L4	104a023	179150420023	DSL_1000	14-APR-2009 21:32	S10991
L5	104a024	179150420024	DSL_5000	14-APR-2009 22:00	S10987
L6	104a025	179150420025	DSL_7500	14-APR-2009 22:27	S10992

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	62853	72410	69018	70005	70165	71385	AVRG		1.44E-5		69306	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-9	100.0	4	500.0	0	1000	1	5000	1	7500	3

JDG 04/15/09 : DSL_100: integrated fuel hump.

Analyst: JDG Date: 04/15/09 Reviewer: ATL Date: 04/16/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 179150420002

Name : DSL_104
Cal Date : 14-APR-2009

ICV 179150420027 (104a027 14-APR-2009) stds: S11498

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	474.5	mg/L	-5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179253466002
Units : mg/L

Name : OTPHEX_176
Date : 24-JUN-2009 21:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	176a003	179253466003	HEXOTP_5	24-JUN-2009 21:13	S11524
L2	176a004	179253466004	HEXOTP_10	24-JUN-2009 21:41	S11525
L3	176a005	179253466005	HEXOTP_25	24-JUN-2009 22:09	S11526
L4	176a006	179253466006	HEXOTP_50	24-JUN-2009 22:36	S11708
L5	176a007	179253466007	HEXOTP_100	24-JUN-2009 23:04	S11528

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	79786	93573	89882	73000	84521	AVRG		1.19E-5		84152	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	5.000	-5	10.00	11	25.00	7	50.00	-13	100.0	0

Analyst: JDG Date: 06/25/09 Reviewer: CW Date: 06/25/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 179344632001
Units : mg/L

Name : Motor Oil_239
Date : 28-AUG-2009 20:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	239a023	179344632023	MO_50	28-AUG-2009 20:14	S12675
L2	239a024	179344632024	MO_250	28-AUG-2009 20:42	S12676
L3	239a025	179344632025	MO_500	28-AUG-2009 21:09	S12677
L4	239a026	179344632026	MO_1000	28-AUG-2009 21:36	S12678
L5	239a027	179344632027	MO_5000	28-AUG-2009 22:04	S12679
L6	239a028	179344632028	MO_7500	28-AUG-2009 22:31	S12680

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	54568	56522	48923	54207	54958	48382	AVRG		1.89E-5		52927	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	3	250.0	7	500.0	-8	1000	2	5000	4	7500	-9

TFB 08/31/09 : All levels & IB: corrected automatically drawn baseline.

Analyst: TFB Date: 08/31/09 Reviewer: CP Date: 08/31/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869297422006
Units : mg/L

Name : DSL_205
Date : 24-JUL-2009 18:53
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	205a010	869297422010	DSL_10	24-JUL-2009 18:53	S11869
L2	205a011	869297422011	DSL_100	24-JUL-2009 19:21	S11870
L3	205a012	869297422012	DSL_500	24-JUL-2009 19:50	S11871
L4	205a013	869297422013	DSL_1000	24-JUL-2009 20:18	S11872
L5	205a014	869297422014	DSL_5000	24-JUL-2009 20:46	S11868
L6	205a015	869297422015	DSL_7500	24-JUL-2009 21:15	S11873

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	23056	26318	24917	24821	23210	22725	AVRG		4.14E-5		24174	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-5	100.0	9	500.0	3	1000	3	5000	-4	7500	-6

DNT 07/27/09 : Level 2 was manually integrated for its fuel hump.

EAH 07/27/09 : There is no data in LIMS for the ICV.

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 869297422006

Name : DSL_205
Cal Date : 24-JUL-2009

ICV 869297422017 (205a017 24-JUL-2009) stds: S12546

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	493.5	mg/L	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636001
Units : mg/L

Name : MO_216
Date : 04-AUG-2009 22:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a015	869311636015	MO_25	04-AUG-2009 22:14	S11818 (2X)
L2	216a016	869311636016	MO_50	04-AUG-2009 22:43	S11818
L3	216a017	869311636017	MO_250	04-AUG-2009 23:11	S11813
L4	216a018	869311636018	MO_500	04-AUG-2009 23:40	S11814
L5	216a019	869311636019	MO_1000	05-AUG-2009 00:08	S11815
L6	216a020	869311636020	MO_2500	05-AUG-2009 00:37	S11816 (2X)
L7	216a021	869311636021	MO_5000	05-AUG-2009 01:06	S11816

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	17139	17622	19956	19809	18460	17610	16201	AVRG		5.52E-5		18114	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Motor Oil C22-C32	25.00	-5	50.00	-3	250.0	10	500.0	9	1000	2	2500	-3	5000	-11

DNT 08/05/09 : Levels 2, 4, and 7 were manually integrated for their fuel humps. IB was integrated for the electrical noise.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 869311636002
Units : mg/L

Name : OTPHEX_216
Date : 05-AUG-2009 02:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216a023	869311636023	HEXOTP_5	05-AUG-2009 02:03	S12539
L2	216a024	869311636024	HEXOTP_10	05-AUG-2009 02:32	S12540
L3	216a025	869311636025	HEXOTP_25	05-AUG-2009 03:00	S12541
L4	216a026	869311636026	HEXOTP_50	05-AUG-2009 03:29	S12542
L5	216a027	869311636027	HEXOTP_100	05-AUG-2009 03:58	S12543
L6	216a028	869311636028	HEXOTP_200	05-AUG-2009 04:27	S12544

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	28756	29700	28774	27978	27178	26145	AVRG		3.56E-5		28088	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	2	10.00	6	25.00	2	50.00	0	100.0	-3	200.0	-7

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 179390704004 File : 271a004 Time : 28-SEP-2009 09:06
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	179150420002	14-APR-2009	69306	70698	500.0	510.0	mg/L	2	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	82613	50.00	49.09	mg/L	-2	15	

TFB 09/29/09 : Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179390704005 File : 271a005 Time : 28-SEP-2009 09:34
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	179344632001	28-AUG-2009	52927	55317	500.0	522.6	mg/L	5	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	85809	50.00	50.98	mg/L	2	15	

TFB 09/29/09 : Manually integrated fuel hump.

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 179390704018 File : 271a018 Time : 28-SEP-2009 20:54
Standards: S12545

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	179150420002	14-APR-2009	69306	69417	250.0	250.4	mg/L	0	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	80242	50.00	47.68	mg/L	-5	15	

TFB 09/28/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 179390704019 File : 271a019 Time : 28-SEP-2009 21:21
Standards: S12822

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	179344632001	28-AUG-2009	52927	52184	500.0	493.0	mg/L	-1	15	
o-Terphenyl	179253466002	24-JUN-2009	84152	84006	50.00	49.91	mg/L	0	15	

Analyst: TFB Date: 09/29/09 Reviewer: SFL Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
Seqnum : 869390814010 File : 271a010 Time : 28-SEP-2009 14:37
Standards: S12546

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	26202	500.0	541.9	mg/L	8	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	29326	50.00	52.20	mg/L	4	15	

TFB 09/28/09 [o-Terphenyl A]: Corrected automatically drawn baseline .

Analyst: TFB Date: 09/28/09 Reviewer: EAH Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869390814011 File : 271a011 Time : 28-SEP-2009 15:05
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	20162	500.0	556.5	mg/L	11	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31758	50.00	56.53	mg/L	13	15	

Analyst: TFB Date: 09/28/09 Reviewer: EAH Date: 09/28/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
Seqnum : 869390814024 File : 271a024 Time : 28-SEP-2009 23:24
Standards: S12547

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	869297422006	24-JUL-2009	24174	27636	1000	1143	mg/L	14	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31863	50.00	56.72	mg/L	13	15	

JDG 09/29/09 : Corrected automatically drawn baseline .

Analyst: JDG Date: 09/29/09 Reviewer: TFB Date: 09/29/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 869390814025 File : 271a025 Time : 28-SEP-2009 23:52
Standards: S12462

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	869311636001	04-AUG-2009	18114	19681	500.0	543.3	mg/L	9	15	
o-Terphenyl	869311636002	05-AUG-2009	28088	31004	50.00	55.19	mg/L	10	15	

Analyst: JDG Date: 09/29/09 Reviewer: TFB Date: 09/29/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179150420

Instrument : GC17A Begun : 04/14/09 11:00
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	104a001	X	PRIMER			04/14/09 11:00	1.0		
002	104a002	IB	CALIB			04/14/09 11:27	1.0		
003	104a003	ICAL	HEXOTP_5			04/14/09 11:55	1.0	1	
004	104a004	ICAL	HEXOTP_10			04/14/09 12:22	1.0	2	
005	104a005	ICAL	HEXOTP_25			04/14/09 12:50	1.0	3	
006	104a006	ICAL	HEXOTP_50			04/14/09 13:17	1.0	4	
007	104a007	ICAL	HEXOTP_100			04/14/09 13:45	1.0	5	
008	104a008	ICAL	HEXOTP_200			04/14/09 14:12	1.0	6	
009	104a009	IB	CALIB			04/14/09 14:39	1.0		
010	104a010	X	IB			04/14/09 15:10	1.0		
011	104a011	X	CMARKER			04/14/09 15:38	1.0	7	
012	104a012	CCV	DSL_250			04/14/09 16:05	1.0	8	
013	104a013	CCV	MO_500			04/14/09 16:33	1.0	9	
014	104a014	CCV	HEXOTP_50			04/14/09 17:01	1.0	10	
015	104a015	CCV	MO_500			04/14/09 17:45	1.0	9	
016	104a016	X	IB			04/14/09 18:20	1.0		
017	104a017	X	IB			04/14/09 18:47	1.0		
018	104a018	X	IB			04/14/09 19:14	1.0		
019	104a019	IB	CALIB			04/14/09 19:42	1.0		
020	104a020	ICAL	DSL_10			04/14/09 20:09	1.0	11	
021	104a021	ICAL	DSL_100			04/14/09 20:37	1.0	12	
022	104a022	ICAL	DSL_500			04/14/09 21:04	1.0	13	
023	104a023	ICAL	DSL_1000			04/14/09 21:32	1.0	14	
024	104a024	ICAL	DSL_5000			04/14/09 22:00	1.0	13	
025	104a025	ICAL	DSL_7500			04/14/09 22:27	1.0	15	
026	104a026	IB	CALIB			04/14/09 22:55	1.0		
027	104a027	ICV	DSL_500			04/14/09 23:23	1.0	16	
028	104a028	X	ICV			04/14/09 23:50	1.0	16	
029	104a029	IB	CALIB			04/15/09 00:18	1.0		
030	104a030	ICAL	MO_50			04/15/09 00:45	1.0	17	
031	104a031	ICAL	MO_250			04/15/09 01:12	1.0	18	
032	104a032	ICAL	MO_500			04/15/09 01:40	1.0	19	
033	104a033	ICAL	MO_1000			04/15/09 02:07	1.0	20	
034	104a034	ICAL	MO_5000			04/15/09 02:34	1.0	21	
035	104a035	ICAL	MO_7500			04/15/09 03:02	1.0	22	
036	104a036	X	IB			04/15/09 03:29	1.0		
037	104a037	CMARKER	C8-C50			04/15/09 03:57	1.0	7	
038	104a038	X	IB			04/15/09 04:24	1.0		

DNT 04/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 9.

JDG 04/15/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 10 through 38.

Analyst: DNT Date: 04/14/09 Reviewer: CP Date: 04/14/09

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11248 8=S11497 9=S11856 10=S11709 11=S10988 12=S10989 13=S10987 14=S10991 15=S10992 16=S11498 17=S11818 18=S11813 19=S11814 20=S11815 21=S11816 22=S11817

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179253466

Instrument : GC17A Begun : 06/24/09 20:19
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	176a001	X	PRIMER				06/24/09 20:19	1.0		
002	176a002	IB	CALIB				06/24/09 20:46	1.0		
003	176a003	ICAL	HEXOTP_5				06/24/09 21:13	1.0	1	
004	176a004	ICAL	HEXOTP_10				06/24/09 21:41	1.0	2	
005	176a005	ICAL	HEXOTP_25				06/24/09 22:09	1.0	3	
006	176a006	ICAL	HEXOTP_50				06/24/09 22:36	1.0	4	
007	176a007	ICAL	HEXOTP_100				06/24/09 23:04	1.0	5	
008	176a008	X	ICAL				06/24/09 23:31	1.0	6	
010	176a010	X	CMARKER				06/25/09 00:26	1.0	7	
011	176a011	X	IB				06/25/09 00:54	1.0		
012	176a012	X	IB				06/25/09 01:22	1.0		
013	176a013	CCV	DSL_250				06/25/09 01:49	1.0	8	
014	176a014	CCV	MO_500				06/25/09 02:17	1.0	9	
015	176a015	X	CCV				06/25/09 02:44	1.0	8	
016	176a016	X	CCV				06/25/09 03:12	1.0	9	
017	176a017	BLANK	QC501324	S	Soil	152313	06/25/09 03:39	1.0		
018	176a018	LCS	QC501325	S	Soil	152313	06/25/09 04:07	1.0		
019	176a019	BLANK	QC500990	S	Water	152234	06/25/09 04:35	1.0		
020	176a020	BS	QC500991	S	Water	152234	06/25/09 05:02	1.0		
021	176a021	BSD	QC500992	S	Water	152234	06/25/09 05:30	1.0		
022	176a022	PREPBLK	QC500993	S	WET DI Leachate	152234	06/25/09 05:57	1.0		
023	176a023	SAMPLE	212960-007	S	Soil	152313	06/25/09 06:25	1.0		
024	176a024	SAMPLE	212960-005	S	Soil	152313	06/25/09 06:52	1.0		
025	176a025	SAMPLE	212908-021	S	WET DI Leachate	152234	06/25/09 07:19	1.0		
026	176a026	SAMPLE	212908-019	S	Soil	152225	06/25/09 07:47	3.0		2:BUNKC:12-40=10000
027	176a027	X	DSL_500				06/25/09 08:15	1.0	10	
028	176a028	CCV	MO_500				06/25/09 08:42	1.0	9	
029	176a029	CCV	DSL_500				06/25/09 09:26	1.0	10	
030	176a030	X	IB				06/25/09 11:53	1.0		
031	176a031	CMARKER	C8-C50				06/25/09 12:20	1.0	7	
032	176a032	CCV	DSL_250				06/25/09 12:47	1.0	8	
033	176a033	CCV	MO_500				06/25/09 13:15	1.0	9	
034	176a034	BLANK	QC501461		Soil	152351	06/25/09 13:48	1.0		
035	176a035	LCS	QC501462		Soil	152351	06/25/09 14:16	1.0		
036	176a036	LCS	QC501512		Soil	152351	06/25/09 14:43	1.0		
037	176a037	CCV	DSL_500				06/25/09 15:25	1.0	10	
038	176a038	CCV	MO_500				06/25/09 15:52	1.0	9	
039	176a039	SAMPLE	213066-001	S	Soil	152313	06/25/09 16:36	10.0		
040	176a040	SAMPLE	213066-002	S	Soil	152313	06/25/09 17:03	10.0		
041	176a041	SAMPLE	213066-003	S	Soil	152313	06/25/09 17:31	10.0		
042	176a042	SAMPLE	213066-004	S	Soil	152313	06/25/09 17:58	10.0		
043	176a043	SAMPLE	213066-005	S	Soil	152313	06/25/09 18:25	5.0		
044	176a044	SAMPLE	213066-006	S	Soil	152313	06/25/09 18:52	5.0		
045	176a045	SAMPLE	213067-001	S	Soil	152313	06/25/09 19:20	10.0		
046	176a046	BLANK	QC501324	S	Soil	152313	06/25/09 19:47	1.0		
047	176a047	LCS	QC501325	S	Soil	152313	06/25/09 20:15	1.0		
048	176a048	BLANK	QC501324		Soil	152313	06/25/09 20:42	1.0		
049	176a049	X	CMARKER				06/25/09 21:10	1.0	7	
050	176a050	CCV	DSL_1000				06/25/09 21:37	1.0	11	
051	176a051	CCV	MO_500				06/25/09 22:05	1.0	9	
052	176a052	X	CCV				06/25/09 22:32	1.0	11	
053	176a053	X	CCV				06/25/09 22:59	1.0	9	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179253466

Instrument : GC17A Begun : 06/24/09 20:19
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
054	176a054	MSS	212960-003	S	Soil	152313	06/25/09 23:26	1.0		2:BUNKC:12-50=5200
055	176a055	MS	QC501326	S	Soil	152313	06/25/09 23:54	1.0		
056	176a056	MSD	QC501327	S	Soil	152313	06/26/09 00:21	1.0		
057	176a057	SAMPLE	212960-006	S	Soil	152313	06/26/09 00:49	5.0		
058	176a058	SAMPLE	212960-001	S	Soil	152313	06/26/09 01:16	1.0		
059	176a059	SAMPLE	212960-002	S	Soil	152313	06/26/09 01:44	1.0		
060	176a060	SAMPLE	212944-002	S	Soil	152264	06/26/09 02:11	10.0		
061	176a061	X	IB				06/26/09 02:39	1.0		
062	176a062	SAMPLE	212960-005	S	Soil	152313	06/26/09 03:07	1.0		
063	176a063	SAMPLE	212960-007	S	Soil	152313	06/26/09 03:34	1.0		
064	176a064	SAMPLE	212960-004	S	Soil	152313	06/26/09 04:02	1.0		
065	176a065	CCV	DSL_250				06/26/09 04:30	1.0	8	
066	176a066	CCV	MO_500				06/26/09 04:57	1.0	9	
067	176a067	X	CCV				06/26/09 05:25	1.0	8	
068	176a068	X	CCV				06/26/09 05:53	1.0	9	

JDG 06/25/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

JDG 06/26/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 68.

Standards used: 1=S11524 2=S11525 3=S11526 4=S11708 5=S11528 6=S11529 7=S11825 8=S12018 9=S12265 10=S12164 11=S12019

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179344632

Instrument : GC17A Begun : 08/27/09 07:52
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	239a001	X	IB			08/27/09 07:52	1.0		
002	239a002	X	CMARKER			08/27/09 08:20	1.0	1	
003	239a003	X	CCV			08/27/09 08:47	1.0	2	
004	239a004	X	CCV			08/27/09 09:14	1.0	3	
005	239a005	X	CMARKER			08/27/09 09:47	1.0	1	
006	239a006	X	IB			08/27/09 12:35	1.0		
007	239a007	X	CMARKER			08/27/09 13:02	1.0	1	
008	239a008	CCV	DSL_500			08/27/09 13:30	1.0	2	
009	239a009	CCV	MO_500			08/27/09 13:57	1.0	3	
010	239a010	CCV	DSL_500			08/27/09 14:47	1.0	2	
011	239a011	CCV	MO_500			08/27/09 15:15	1.0	3	
012	239a012	X	TANKCHECK			08/27/09 18:49	1.0		
013	239a013	X	TANKCHECK			08/27/09 19:16	1.0		
014	239a014	IB	CLEAN			08/27/09 19:44	1.0		
015	239a015	X	IB			08/28/09 14:09	1.0		
016	239a016	X	CMARKER			08/28/09 14:36	1.0	1	
017	239a017	CCV	DSL_500			08/28/09 15:04	1.0	2	
018	239a018	CCV	MO_500			08/28/09 15:31	1.0	3	
019	239a019	CCV	MO_500			08/28/09 16:11	1.0	3	
020	239a020	X	IB			08/28/09 18:51	1.0		
021	239a021	X	IB			08/28/09 19:19	1.0		
022	239a022	IB	CALIB			08/28/09 19:47	1.0		
023	239a023	ICAL	MO_50			08/28/09 20:14	1.0	4	
024	239a024	ICAL	MO_250			08/28/09 20:42	1.0	5	
025	239a025	ICAL	MO_500			08/28/09 21:09	1.0	6	
026	239a026	ICAL	MO_1000			08/28/09 21:36	1.0	7	
027	239a027	ICAL	MO_5000			08/28/09 22:04	1.0	8	
028	239a028	ICAL	MO_7500			08/28/09 22:31	1.0	9	
029	239a029	IB	CALIB			08/28/09 22:58	1.0		
030	239a030	CMARKER	C8C-50			08/28/09 23:26	1.0	1	
031	239a031	IB	CALIB			08/28/09 23:53	1.0		

DNT 08/31/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

Analyst: DNT Date: 08/31/09 Reviewer: CP Date: 08/31/09

Standards used: 1=S11825 2=S12546 3=S12462 4=S12675 5=S12676 6=S12677 7=S12678 8=S12679 9=S12680

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 179390704

Instrument : GC17A Begun : 09/28/09 07:44
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	271a001	X	PRIMER				09/28/09 07:44	1.0		
002	271a002	X	IB				09/28/09 08:11	1.0		
003	271a003	X	CMARKER				09/28/09 08:39	1.0	1	
004	271a004	CCV	DSL_500				09/28/09 09:06	1.0	2	
005	271a005	CCV	MO_500				09/28/09 09:34	1.0	3	
006	271a006	CCV	KERO_250				09/28/09 12:56	1.0	4	
007	271a007	BLANK	QC513709	S	Soil	155324	09/28/09 14:55	1.0		
008	271a008	SAMPLE	215160-003	S	Soil	155324	09/28/09 15:22	1.0		
009	271a009	SAMPLE	215160-001	S	Soil	155324	09/28/09 15:49	1.0		2:BUNKC:12-40=10000
010	271a010	SAMPLE	215160-002	S	Soil	155324	09/28/09 16:17	2.0		2:BUNKC:12-40=12000
011	271a011	X	IB				09/28/09 16:44	1.0		
012	271a012	SAMPLE	215064-004		Water	155240	09/28/09 18:11	1.0		
013	271a013	SAMPLE	215064-006		Water	155240	09/28/09 18:38	1.0		
014	271a014	SAMPLE	215064-007		Water	155240	09/28/09 19:05	1.0		
015	271a015	SAMPLE	215072-007		Water	155240	09/28/09 19:32	1.0		
016	271a016	SAMPLE	215072-008		Water	155240	09/28/09 20:00	1.0		
017	271a017	SAMPLE	215072-009		Water	155240	09/28/09 20:27	1.0		
018	271a018	CCV	DSL_250				09/28/09 20:54	1.0	5	
019	271a019	CCV	MO_500				09/28/09 21:21	1.0	3	
020	271a020	CCV	KERO_250				09/28/09 21:48	1.0	4	
021	271a021	CCV	BUNK_500				09/28/09 22:16	1.0	6	
022	271a022	X	CCV				09/28/09 22:43	1.0	5	
023	271a023	X	CCV				09/28/09 23:11	1.0	3	
024	271a024	X	CCV				09/28/09 23:38	1.0	4	
025	271a025	X	CCV				09/29/09 00:05	1.0	6	
026	271a026	LCS	QC513963	S	Soil	155381	09/29/09 00:32	1.0		
027	271a027	SAMPLE	215191-010	S	Soil	155381	09/29/09 00:59	3.0		
028	271a028	SAMPLE	215191-001	S	Soil	155381	09/29/09 01:26	3.0		2:BUNKC:12-40=11000
029	271a029	MS	QC513964	S	Soil	155381	09/29/09 01:54	10.0		2:BUNKC:12-40=6400
030	271a030	MSD	QC513965	S	Soil	155381	09/29/09 02:21	10.0		2:BUNKC:12-40=6700
031	271a031	X	IB				09/29/09 02:48	1.0		
032	271a032	LCS	QC513962	S	Soil	155381	09/29/09 03:16	1.0		
033	271a033	X	CMARKER				09/29/09 03:43	1.0	1	
034	271a034	CCV	DSL_1000				09/29/09 04:11	1.0	7	
035	271a035	CCV	MO_500				09/29/09 04:38	1.0	3	
036	271a036	CCV	BUNK_500				09/29/09 05:05	1.0	6	
037	271a037	X	CCV				09/29/09 05:33	1.0	7	
038	271a038	X	CCV				09/29/09 06:00	1.0	3	
039	271a039	X	CCV				09/29/09 06:28	1.0	6	

JDG 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S11825 2=S12546 3=S12822 4=S12884 5=S12545 6=S12582 7=S12547

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A Begun : 07/24/09 14:35
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	205a001	X	PRIMER			07/24/09 14:35	1.0		
002	205a002	X	IB			07/24/09 15:03	1.0		
003	205a003	X	CMARKER			07/24/09 15:32	1.0	1	
004	205a004	X	CCV			07/24/09 16:00	1.0	2	
005	205a005	X	CMARKER			07/24/09 16:29	1.0	1	
006	205a006	X	IB			07/24/09 16:59	1.0		
007	205a007	X	IB			07/24/09 17:28	1.0		
008	205a008	X	IB			07/24/09 17:56	1.0		
009	205a009	IB	CALIB			07/24/09 18:24	1.0		
010	205a010	ICAL	DSL_10			07/24/09 18:53	1.0	3	
011	205a011	ICAL	DSL_100			07/24/09 19:21	1.0	4	
012	205a012	ICAL	DSL_500			07/24/09 19:50	1.0	5	
013	205a013	ICAL	DSL_1000			07/24/09 20:18	1.0	6	
014	205a014	ICAL	DSL_5000			07/24/09 20:46	1.0	7	
015	205a015	ICAL	DSL_7500			07/24/09 21:15	1.0	8	
016	205a016	IB	CALIB			07/24/09 21:44	1.0		
017	205a017	ICV	DSL_500			07/24/09 22:13	1.0	9	
018	205a018	X	ICV			07/24/09 22:41	1.0	9	
019	205a019	IB	CALIB			07/24/09 23:10	1.0		
020	205a020	ICAL	MO_25			07/24/09 23:39	1.0	10	
021	205a021	ICAL	MO_50			07/25/09 00:07	1.0	10	
022	205a022	ICAL	MO_250			07/25/09 00:36	1.0	11	
023	205a023	ICAL	MO_500			07/25/09 01:04	1.0	12	
024	205a024	ICAL	MO_1000			07/25/09 01:33	1.0	13	
025	205a025	ICAL	MO_2500			07/25/09 02:02	1.0	14	
026	205a026	IB	CALIB			07/25/09 02:31	1.0		
027	205a027	ICAL	HEXOTP_5			07/25/09 03:00	1.0	15	
028	205a028	ICAL	HEXOTP_10			07/25/09 03:29	1.0	16	
029	205a029	ICAL	HEXOTP_25			07/25/09 03:57	1.0	17	
030	205a030	ICAL	HEXOTP_50			07/25/09 04:26	1.0	18	
031	205a031	ICAL	HEXOTP_100			07/25/09 04:55	1.0	19	
032	205a032	ICAL	HEXOTP_200			07/25/09 05:24	1.0	20	
033	205a033	IB	CALIB			07/25/09 05:52	1.0		
034	205a034	ICAL	JP5_10			07/25/09 06:21	1.0	21	
035	205a035	ICAL	JP5_100			07/25/09 06:50	1.0	22	
036	205a036	ICAL	JP5_500			07/25/09 07:19	1.0	23	
037	205a037	ICAL	JP5_1500			07/25/09 07:47	1.0	24	
038	205a038	ICAL	JP5_2500			07/25/09 08:16	1.0	25	
039	205a039	ICAL	JP5_5000			07/25/09 08:45	1.0	26	
040	205a040	IB	CALIB			07/25/09 09:13	1.0		
041	205a041	ICAL	JET_10			07/25/09 09:42	1.0	27	
042	205a042	ICAL	JET_100			07/25/09 10:11	1.0	28	
043	205a043	ICAL	JET_500			07/25/09 10:39	1.0	29	
044	205a044	ICAL	JET_1000			07/25/09 11:08	1.0	30	
045	205a045	ICAL	JET_2000			07/25/09 11:37	1.0	31	
046	205a046	ICAL	JET_3000			07/25/09 12:05	1.0	32	
047	205a047	X	IB			07/25/09 12:33	1.0		
048	205a048	CMARKER	C8-C50			07/25/09 13:02	1.0	1	

DNT 07/27/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 48.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869297422

Instrument : GC26A
Method : EPA 8015B

Begun : 07/24/09 14:35
SOP Version : TEH_rv13

Analyst: DNT Date: 07/27/09 Reviewer: EAH Date: 07/27/09

Standards used: 1=S11825 2=S12018 3=S11869 4=S11870 5=S11871 6=S11872 7=S11868 8=S11873 9=S12546 10=S11818 11=S11813 12=S11814 13=S11815 14=S11816 15=S12539 16=S12540 17=S12541 18=S12542 19=S12543 20=S12544 21=S11894 22=S11895 23=S11896 24=S11897 25=S11898 26=S11893 27=S12341 28=S12342 29=S12343 30=S12344 31=S12345 32=S12346

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869311636

Instrument : GC26A Begun : 08/04/09 09:56
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	216a001	X	IB			08/04/09 09:56	1.0		
002	216a002	X	CMARKER			08/04/09 10:24	1.0	1	
003	216a003	CCV	DSL_250			08/04/09 10:53	1.0	2	
004	216a004	CCV	MO_500			08/04/09 11:21	1.0	3	
005	216a005	CCV	MO_500			08/04/09 13:45	1.0	3	
006	216a006	X	IB			08/04/09 16:23	1.0		
007	216a007	X	IB			08/04/09 16:51	1.0		
008	216a008	X	CMARKER			08/04/09 17:20	1.0	1	
009	216a009	CCV	DSL_250			08/04/09 17:49	1.0	2	
010	216a010	CCV	MO_500			08/04/09 18:17	1.0	3	
011	216a011	CCV	MO_500			08/04/09 19:00	1.0	3	
012	216a012	X	IB			08/04/09 20:27	1.0		
013	216a013	X	IB			08/04/09 21:18	1.0		
014	216a014	IB	CALIB			08/04/09 21:46	1.0		
015	216a015	ICAL	MO_25			08/04/09 22:14	1.0	4	
016	216a016	ICAL	MO_50			08/04/09 22:43	1.0	4	
017	216a017	ICAL	MO_250			08/04/09 23:11	1.0	5	
018	216a018	ICAL	MO_500			08/04/09 23:40	1.0	6	
019	216a019	ICAL	MO_1000			08/05/09 00:08	1.0	7	
020	216a020	ICAL	MO_2500			08/05/09 00:37	1.0	8	
021	216a021	ICAL	MO_5000			08/05/09 01:06	1.0	8	
022	216a022	IB	CALIB			08/05/09 01:34	1.0		
023	216a023	ICAL	HEXOTP_5			08/05/09 02:03	1.0	9	
024	216a024	ICAL	HEXOTP_10			08/05/09 02:32	1.0	10	
025	216a025	ICAL	HEXOTP_25			08/05/09 03:00	1.0	11	
026	216a026	ICAL	HEXOTP_50			08/05/09 03:29	1.0	12	
027	216a027	ICAL	HEXOTP_100			08/05/09 03:58	1.0	13	
028	216a028	ICAL	HEXOTP_200			08/05/09 04:27	1.0	14	
029	216a029	X	IB			08/05/09 04:56	1.0		
030	216a030	CMARKER	C8-C50			08/05/09 05:24	1.0	1	

DNT 08/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 30.

Analyst: DNT Date: 08/05/09 Reviewer: EAH Date: 08/05/09

Standards used: 1=S11825 2=S12545 3=S12462 4=S11818 5=S11813 6=S11814 7=S11815 8=S11816 9=S12539 10=S12540 11=S12541 12=S12542 13=S12543 14=S12544

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869390814

Instrument : GC26A Begun : 09/28/09 09:34
Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
002	271a002	X	IB				09/28/09 09:34	1.0		
003	271a003	X	IB				09/28/09 10:02	1.0		
004	271a004	X	CMARKER				09/28/09 10:31	1.0	1	
005	271a005	CCV	DSL_1000				09/28/09 10:59	1.0	2	
006	271a006	CCV	MO_500				09/28/09 11:28	1.0	3	
007	271a007	SAMPLE	215095-003	S	Soil	155343	09/28/09 12:29	1.0		
008	271a008	MSD	QC513800	S	Soil	155343	09/28/09 12:57	3.0		2:BUNKC:12-50=6700
009	271a009	MS	QC513799	S	Soil	155343	09/28/09 13:25	3.0		
010	271a010	CCV	DSL_500				09/28/09 14:37	1.0	4	
011	271a011	CCV	MO_500				09/28/09 15:05	1.0	3	
012	271a012	CCV	JP5_250				09/28/09 16:20	1.0	5	
013	271a013	BLANK	QC513380	S	Water	155240	09/28/09 18:13	1.0		
014	271a014	BLANK	QC513380		Water	155240	09/28/09 18:41	1.0		
015	271a015	LCS	QC513381	S	Water	155240	09/28/09 19:10	1.0		
016	271a016	LCS	QC513384		Water	155240	09/28/09 19:38	1.0		
017	271a017	MSS	215064-005		Water	155240	09/28/09 20:06	1.0		
018	271a018	MS	QC513382		Water	155240	09/28/09 20:34	1.0		
019	271a019	MSD	QC513383		Water	155240	09/28/09 21:02	1.0		
020	271a020	SAMPLE	215015-007	S	Water	155240	09/28/09 21:30	1.0		
021	271a021	SAMPLE	215015-008	S	Water	155240	09/28/09 21:59	1.0		
022	271a022	SAMPLE	215015-010	S	Water	155240	09/28/09 22:27	1.0		
023	271a023	X	CMARKER				09/28/09 22:55	1.0	1	
024	271a024	CCV	DSL_1000				09/28/09 23:24	1.0	2	
025	271a025	CCV	MO_500				09/28/09 23:52	1.0	3	
026	271a026	CCV	JP5_250				09/29/09 00:20	1.0	5	
027	271a027	X	CCV				09/29/09 00:48	1.0	2	
028	271a028	X	CCV				09/29/09 01:17	1.0	3	
029	271a029	X	CCV				09/29/09 01:45	1.0	5	
030	271a030	SAMPLE	215015-011	S	Water	155240	09/29/09 02:13	1.0		
031	271a031	SAMPLE	215015-012	S	Water	155240	09/29/09 02:41	1.0		
032	271a032	SAMPLE	215015-013	S	Water	155240	09/29/09 03:10	1.0		
033	271a033	SAMPLE	215015-014	S	Water	155240	09/29/09 03:38	1.0		
034	271a034	BLANK	QC513591	S	Water	155293	09/29/09 04:06	1.0		
035	271a035	SAMPLE	215015-015	S	Water	155293	09/29/09 04:34	1.0		
036	271a036	SAMPLE	215015-016	S	Water	155293	09/29/09 05:03	1.0		
037	271a037	SAMPLE	215126-001	S	Water	155293	09/29/09 05:31	1.0		
038	271a038	SAMPLE	215126-002	S	Water	155293	09/29/09 06:00	1.0		
039	271a039	SAMPLE	215126-003	S	Water	155293	09/29/09 06:28	1.0		
040	271a040	CCV	DSL_250				09/29/09 06:56	1.0	6	
041	271a041	CCV	MO_500				09/29/09 07:24	1.0	3	
042	271a042	CCV	JP5_250				09/29/09 07:53	1.0	5	
043	271a043	SAMPLE	215126-004	S	Water	155293	09/29/09 09:57	1.0		
044	271a044	SAMPLE	215126-005	S	Water	155293	09/29/09 10:25	1.0		
045	271a045	X	CMARKER				09/29/09 12:05	1.0	1	
046	271a046	CCV	DSL_1000				09/29/09 12:33	1.0	2	
047	271a047	CCV	MO_500				09/29/09 13:01	1.0	3	
048	271a048	CCV	JP5_250				09/29/09 13:30	1.0	5	

JDG 09/28/09 : #1 (IB) did not run.

TFB 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 2 through 11.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 869390814

Instrument : GC26A Begun : 09/28/09 09:34
Method : EPA 8015B SOP Version : TEH_rv13

JDG 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 12 through 42.

TFB 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 43 through 48.

Standards used: 1=S11825 2=S12547 3=S12462 4=S12546 5=S12969 6=S12545

SAMPLE PREPARATION SUMMARY

Batch # : 155240
Started By : CRD
Method : 3520C
Spike #1 ID : S12934

Prep Date : 23-SEP-2009 18:50
SOP Version : TEH_3520_rv12
Spike #2 ID : S12290

Analysis : TEH
Finished By : KKM
Units : mL
Spike #3 ID : S12972

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215015-007		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-008		Water	500	2.5	1	0.005	5	.5			3630C	TEH	
215015-010		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-011		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-012		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-013		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215015-014		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
215058-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215058-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
215064-004		Water	500	2.5	1	0.005	7	.5				TEHM	
215064-005		Water	500	2.5	1	0.005	7	.5				TEHM	MSS
215064-006		Water	500	2.5	1	0.005	7	.5				TEHM	
215064-007		Water	500	2.5	1	0.005	7	.5				TEHM	
215072-007		Water	500	2.5	1	0.005	7	.5				TEHM	
215072-008		Water	500	2.5	1	0.005	7	.5				TEHM	
215072-009		Water	500	2.5	1	0.005	5	.5				TEHM	
215075-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC513380	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC513381	LCS	Water	500	2.5	1	0.005		.5		.5	3630C		
QC513382	MS	Water	500	2.5	1	0.005	7	.5		.5			
QC513383	MSD	Water	500	2.5	1	0.005	7	.5		.5			
QC513384	LCS	Water	500	2.5	1	0.005		.5	.5				

Analyst: TFB Date: 09/29/09 Reviewer: JDG Date: 09/29/09

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

Page 51 BK 2909

LIMS Batch No: 155240
LIMS Analysis: TEH
Date Extracted: 9/23/09

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☑ EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
215015-007	H	500	7	2.5	X	
8	D		5			
10	H		7			
11						
12						
13						
14						
215058-001	H					
4	G					
5	F					
8	J					
9						
215064-004	D					
5	K					MSS
6	D		5			
7			7			
215072-007						
8						
9			5			
215075-001	B		7		X	
MB QC513380						
LCS 1						
MS 2	J		7			
MSD 3						
LCS 4						MO

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S129340	SL for CRD 9/23/09
0.5*/0.5 mL of TEH_SP was added to all spikes	S122900*/S129720	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F5093334	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EML9/8	
Extraction Start Time:	1900	
Extraction End Time:	1310	KKM 9/24/09
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	KKM 9/28/09
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EUB4900790A	
Concentrated to final volume at temperature (degrees C)	100	
Relinquished to TEH Department	✓	

SL for CRD 9/23/09
Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

TEB 9/28/09
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KKM
Cleanup Date: 9/28/09

Benchbook # **BK 2939**
Page 25

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
215015 · 007	155240	1.0	1.0	
008				
010				
011				
012				
013				
014				
215058 · 001				
004				
005				
008				
009				
215075 · 001				
MBG0513380				
LCS 1				

TFB 9/28/09

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	KKM 9/28/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11916	
Extracts were eluted with 4.0 mL CH_2Cl_2	EMB4922 05	
Concentrated to volumes as noted above		

KKM 9/28/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

TFB 9/28/09
Reviewed by / Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: NAV
Cleanup Date: 9/29/09

Benchbook # **BK 2939**
Page 29

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
215082-011	155438	1.0	1.0	
215167-001				
215236-001				
-002				
-003				
-004				
-005				
-006				
MB QC514196				
LCS Bank 7				
LCS MO514227 TFB 9/29/09				
215143-001	155394	1.0	1.0	
215145-006				
MB QC514017				
LCS 8				
MS 9				
MSD 20				
215058-008	155240	0.5	0.5 ~~1.0~~ NAV 9/29/09	RE-56
215218-015	155438	1.0	1.0	
-016				
-017				

TFB 9/29/09

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	N/A	NAV 9/29/09
☑ Extracts were cleaned up using 1.0 g cartridges	SP11910	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM49205	
Concentrated to volumes as noted above	✓	

Continued from page ___
Continued on page ___

Extraction Chemist / Date 9/29/09

TFB 9/29/09
Reviewed by / Date

Laboratory Job Number 215072

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091709A	Batch#:	155470
Lab ID:	215072-001	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-091709A	Batch#:	155470
Lab ID:	215072-001	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	113	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	89	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73B-9C1	Batch#:	155479
Lab ID:	215072-002	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	6.1	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.4	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	1.1	0.5	
Trichloroethene	7.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73B-9C1	Batch#:	155479
Lab ID:	215072-002	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	20	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 M1 R2 V1
1,1-Dichloroethane	14	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	22	0.5	
2,2-Dichloropropane	ND	0.5	L1 M1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	M1
1,1-Dichloropropene	ND	0.5	M1
Carbon Tetrachloride	ND	0.5	L1 M1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	84	0.5	M2
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.3	0.5	M1

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 M1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 M1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-72A-9C1	Batch#:	155479
Lab ID:	215072-004	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	6.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	8.0	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	6.5	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	0.9	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	35	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	3.5	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-72A-9C1	Batch#:	155479
Lab ID:	215072-004	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-72B-9C1	Batch#:	155479
Lab ID:	215072-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	4.0	D2
Chloromethane	ND	4.0	D2
Vinyl Chloride	ND	2.0	D2
Bromomethane	ND	4.0	D2 V9
Chloroethane	ND	4.0	D2
Trichlorofluoromethane	ND	4.0	D2
Iodomethane	ND	40	D2
Acetone	ND	40	D2
1,1-Dichloroethene	25	2.0	D2
Methylene Chloride	ND	40	D2
Carbon Disulfide	ND	2.0	D2
MTBE	ND	2.0	D2
trans-1,2-Dichloroethene	ND	2.0	D2
Vinyl Acetate	ND	40	D2 L1 R2 V1
1,1-Dichloroethane	11	2.0	D2
2-Butanone	ND	40	D2
cis-1,2-Dichloroethene	42	2.0	D2
2,2-Dichloropropane	ND	2.0	D2 L1 V1
Chloroform	2.3	2.0	D2
Bromochloromethane	ND	2.0	D2
1,1,1-Trichloroethane	ND	2.0	D2
1,1-Dichloropropene	ND	2.0	D2
Carbon Tetrachloride	ND	2.0	D2 L1
1,2-Dichloroethane	ND	2.0	D2
Benzene	ND	2.0	D2
Trichloroethene	280	2.0	D2
1,2-Dichloropropane	ND	2.0	D2
Bromodichloromethane	ND	2.0	D2
Dibromomethane	ND	2.0	D2
4-Methyl-2-Pentanone	ND	40	D2
cis-1,3-Dichloropropene	ND	2.0	D2
Toluene	ND	2.0	D2
trans-1,3-Dichloropropene	ND	2.0	D2
1,1,2-Trichloroethane	ND	2.0	D2
2-Hexanone	ND	40	D2
1,3-Dichloropropane	ND	2.0	D2
Tetrachloroethene	3.9	2.0	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-72B-9C1	Batch#:	155479
Lab ID:	215072-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	2.0	D2
1,2-Dibromoethane	ND	2.0	D2
Chlorobenzene	ND	2.0	D2
1,1,1,2-Tetrachloroethane	ND	2.0	D2
Ethylbenzene	ND	2.0	D2
m,p-Xylenes	ND	2.0	D2
o-Xylene	ND	2.0	D2
Styrene	ND	2.0	D2
Bromoform	ND	4.0	D2
Isopropylbenzene	ND	2.0	D2
1,1,2,2-Tetrachloroethane	ND	2.0	D2
1,2,3-Trichloropropane	ND	2.0	D2
Propylbenzene	ND	2.0	D2
Bromobenzene	ND	2.0	D2
1,3,5-Trimethylbenzene	ND	2.0	D2
2-Chlorotoluene	ND	2.0	D2
4-Chlorotoluene	ND	2.0	D2
tert-Butylbenzene	ND	2.0	D2
1,2,4-Trimethylbenzene	ND	2.0	D2
sec-Butylbenzene	ND	2.0	D2 L1 V1
para-Isopropyl Toluene	ND	2.0	D2
1,3-Dichlorobenzene	ND	2.0	D2
1,4-Dichlorobenzene	ND	2.0	D2
n-Butylbenzene	ND	2.0	D2 L1 V1
1,2-Dichlorobenzene	ND	2.0	D2
1,2-Dibromo-3-Chloropropane	ND	8.0	D2
1,2,4-Trichlorobenzene	ND	2.0	D2
Hexachlorobutadiene	ND	8.0	D2
Naphthalene	ND	8.0	D2
1,2,3-Trichlorobenzene	ND	2.0	D2
Xylene (total)	ND	2.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-528-9C1	Batch#:	155528
Lab ID:	215072-006	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	5.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	5.0	D2
Chloromethane	ND	5.0	D2
Vinyl Chloride	ND	2.5	D2
Bromomethane	ND	5.0	D2
Chloroethane	ND	5.0	D2 V1
Trichlorofluoromethane	ND	5.0	D2
Iodomethane	ND	50	D2 L2
Acetone	ND	50	D2
1,1-Dichloroethene	26	2.5	D2
Methylene Chloride	ND	50	D2
Carbon Disulfide	ND	2.5	D2
MTBE	ND	2.5	D2
trans-1,2-Dichloroethene	ND	2.5	D2
Vinyl Acetate	ND	50	D2
1,1-Dichloroethane	12	2.5	D2
2-Butanone	ND	50	D2
cis-1,2-Dichloroethene	45	2.5	D2
2,2-Dichloropropane	ND	2.5	D2
Chloroform	2.7	2.5	D2
Bromochloromethane	ND	2.5	D2
1,1,1-Trichloroethane	ND	2.5	D2
1,1-Dichloropropene	ND	2.5	D2
Carbon Tetrachloride	ND	2.5	D2
1,2-Dichloroethane	ND	2.5	D2
Benzene	ND	2.5	D2
Trichloroethene	310	2.5	D2
1,2-Dichloropropane	ND	2.5	D2
Bromodichloromethane	ND	2.5	D2
Dibromomethane	ND	2.5	D2
4-Methyl-2-Pentanone	ND	50	D2
cis-1,3-Dichloropropene	ND	2.5	D2
Toluene	ND	2.5	D2
trans-1,3-Dichloropropene	ND	2.5	D2
1,1,2-Trichloroethane	ND	2.5	D2
2-Hexanone	ND	50	D2
1,3-Dichloropropane	ND	2.5	D2
Tetrachloroethene	4.5	2.5	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-528-9C1	Batch#:	155528
Lab ID:	215072-006	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	5.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	2.5	D2
1,2-Dibromoethane	ND	2.5	D2
Chlorobenzene	ND	2.5	D2
1,1,1,2-Tetrachloroethane	ND	2.5	D2
Ethylbenzene	ND	2.5	D2
m,p-Xylenes	ND	2.5	D2
o-Xylene	ND	2.5	D2
Styrene	ND	2.5	D2
Bromoform	ND	5.0	D2
Isopropylbenzene	ND	2.5	D2
1,1,2,2-Tetrachloroethane	ND	2.5	D2
1,2,3-Trichloropropane	ND	2.5	D2
Propylbenzene	ND	2.5	D2
Bromobenzene	ND	2.5	D2
1,3,5-Trimethylbenzene	ND	2.5	D2
2-Chlorotoluene	ND	2.5	D2
4-Chlorotoluene	ND	2.5	D2
tert-Butylbenzene	ND	2.5	D2
1,2,4-Trimethylbenzene	ND	2.5	D2
sec-Butylbenzene	ND	2.5	D2
para-Isopropyl Toluene	ND	2.5	D2
1,3-Dichlorobenzene	ND	2.5	D2
1,4-Dichlorobenzene	ND	2.5	D2
n-Butylbenzene	ND	2.5	D2
1,2-Dichlorobenzene	ND	2.5	D2
1,2-Dibromo-3-Chloropropane	ND	10	D2
1,2,4-Trichlorobenzene	ND	2.5	D2
Hexachlorobutadiene	ND	10	D2
Naphthalene	ND	10	D2
1,2,3-Trichlorobenzene	ND	2.5	D2
Xylene (total)	ND	2.5	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-116A-9C1	Batch#:	155528
Lab ID:	215072-007	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	3.333		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	3.3	D2
Chloromethane	ND	3.3	D2
Vinyl Chloride	ND	1.7	D2
Bromomethane	ND	3.3	D2
Chloroethane	ND	3.3	D2 V1
Trichlorofluoromethane	ND	3.3	D2
Iodomethane	ND	33	D2 L2
Acetone	ND	33	D2
1,1-Dichloroethene	ND	1.7	D2
Methylene Chloride	ND	33	D2
Carbon Disulfide	1.7	1.7	D2
MTBE	66	1.7	D2
trans-1,2-Dichloroethene	ND	1.7	D2
Vinyl Acetate	ND	33	D2
1,1-Dichloroethane	ND	1.7	D2
2-Butanone	ND	33	D2
cis-1,2-Dichloroethene	ND	1.7	D2
2,2-Dichloropropane	ND	1.7	D2
Chloroform	ND	1.7	D2
Bromochloromethane	ND	1.7	D2
1,1,1-Trichloroethane	ND	1.7	D2
1,1-Dichloropropene	ND	1.7	D2
Carbon Tetrachloride	ND	1.7	D2
1,2-Dichloroethane	ND	1.7	D2
Benzene	200	1.7	D2
Trichloroethene	ND	1.7	D2
1,2-Dichloropropane	ND	1.7	D2
Bromodichloromethane	ND	1.7	D2
Dibromomethane	ND	1.7	D2
4-Methyl-2-Pentanone	ND	33	D2
cis-1,3-Dichloropropene	ND	1.7	D2
Toluene	ND	1.7	D2
trans-1,3-Dichloropropene	ND	1.7	D2
1,1,2-Trichloroethane	ND	1.7	D2
2-Hexanone	ND	33	D2
1,3-Dichloropropane	ND	1.7	D2
Tetrachloroethene	ND	1.7	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-116A-9C1	Batch#:	155528
Lab ID:	215072-007	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	3.333		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.7	D2
1,2-Dibromoethane	ND	1.7	D2
Chlorobenzene	ND	1.7	D2
1,1,1,2-Tetrachloroethane	ND	1.7	D2
Ethylbenzene	11	1.7	D2
m,p-Xylenes	ND	1.7	D2
o-Xylene	ND	1.7	D2
Styrene	ND	1.7	D2
Bromoform	ND	3.3	D2
Isopropylbenzene	75	1.7	D2
1,1,2,2-Tetrachloroethane	ND	1.7	D2
1,2,3-Trichloropropane	ND	1.7	D2
Propylbenzene	67	1.7	D2
Bromobenzene	ND	1.7	D2
1,3,5-Trimethylbenzene	ND	1.7	D2
2-Chlorotoluene	ND	1.7	D2
4-Chlorotoluene	ND	1.7	D2
tert-Butylbenzene	ND	1.7	D2
1,2,4-Trimethylbenzene	ND	1.7	D2
sec-Butylbenzene	8.5	1.7	D2
para-Isopropyl Toluene	ND	1.7	D2
1,3-Dichlorobenzene	ND	1.7	D2
1,4-Dichlorobenzene	ND	1.7	D2
n-Butylbenzene	ND	1.7	D2
1,2-Dichlorobenzene	ND	1.7	D2
1,2-Dibromo-3-Chloropropane	ND	6.7	D2
1,2,4-Trichlorobenzene	ND	1.7	D2
Hexachlorobutadiene	ND	6.7	D2
Naphthalene	72	6.7	D2
1,2,3-Trichlorobenzene	ND	1.7	D2
Xylene (total)	ND	1.7	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-38A-9C1	Batch#:	155479
Lab ID:	215072-008	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	10.00		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	10	D1
Chloromethane	ND	10	D1
Vinyl Chloride	ND	5.0	D1
Bromomethane	ND	10	D1 V9
Chloroethane	ND	10	D1
Trichlorofluoromethane	ND	10	D1
Iodomethane	ND	100	D1
Acetone	ND	100	D1
1,1-Dichloroethene	ND	5.0	D1
Methylene Chloride	ND	100	D1
Carbon Disulfide	ND	5.0	D1
MTBE	22	5.0	D1
trans-1,2-Dichloroethene	ND	5.0	D1
Vinyl Acetate	ND	100	D1 L1 R2 V1
1,1-Dichloroethane	ND	5.0	D1
2-Butanone	ND	100	D1
cis-1,2-Dichloroethene	ND	5.0	D1
2,2-Dichloropropane	ND	5.0	D1 L1 V1
Chloroform	ND	5.0	D1
Bromochloromethane	ND	5.0	D1
1,1,1-Trichloroethane	ND	5.0	D1
1,1-Dichloropropene	ND	5.0	D1
Carbon Tetrachloride	ND	5.0	D1 L1
1,2-Dichloroethane	ND	5.0	D1
Benzene	470	5.0	D1
Trichloroethene	ND	5.0	D1
1,2-Dichloropropane	ND	5.0	D1
Bromodichloromethane	ND	5.0	D1
Dibromomethane	ND	5.0	D1
4-Methyl-2-Pentanone	ND	100	D1
cis-1,3-Dichloropropene	ND	5.0	D1
Toluene	ND	5.0	D1
trans-1,3-Dichloropropene	ND	5.0	D1
1,1,2-Trichloroethane	ND	5.0	D1
2-Hexanone	ND	100	D1
1,3-Dichloropropane	ND	5.0	D1
Tetrachloroethene	ND	5.0	D1

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-38A-9C1	Batch#:	155479
Lab ID:	215072-008	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	10.00		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	5.0	D1
1,2-Dibromoethane	ND	5.0	D1
Chlorobenzene	ND	5.0	D1
1,1,1,2-Tetrachloroethane	ND	5.0	D1
Ethylbenzene	12	5.0	D1
m,p-Xylenes	ND	5.0	D1
o-Xylene	ND	5.0	D1
Styrene	ND	5.0	D1
Bromoform	ND	10	D1
Isopropylbenzene	18	5.0	D1
1,1,2,2-Tetrachloroethane	ND	5.0	D1
1,2,3-Trichloropropane	ND	5.0	D1
Propylbenzene	15	5.0	D1
Bromobenzene	ND	5.0	D1
1,3,5-Trimethylbenzene	ND	5.0	D1
2-Chlorotoluene	ND	5.0	D1
4-Chlorotoluene	ND	5.0	D1
tert-Butylbenzene	ND	5.0	D1
1,2,4-Trimethylbenzene	ND	5.0	D1
sec-Butylbenzene	ND	5.0	D1 L1 V1
para-Isopropyl Toluene	ND	5.0	D1
1,3-Dichlorobenzene	ND	5.0	D1
1,4-Dichlorobenzene	ND	5.0	D1
n-Butylbenzene	ND	5.0	D1 L1 V1
1,2-Dichlorobenzene	ND	5.0	D1
1,2-Dibromo-3-Chloropropane	ND	20	D1
1,2,4-Trichlorobenzene	ND	5.0	D1
Hexachlorobutadiene	ND	20	D1
Naphthalene	37	20	D1
1,2,3-Trichlorobenzene	ND	5.0	D1
Xylene (total)	ND	5.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-530-9C1	Batch#:	155479
Lab ID:	215072-009	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-530-9C1	Batch#:	155479
Lab ID:	215072-009	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-49B-9C1	Batch#:	155479
Lab ID:	215072-010	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.2	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	1.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.9	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	0.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	13	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.7	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-49B-9C1	Batch#:	155479
Lab ID:	215072-010	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	114	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PZ-1B-9C1	Batch#:	155479
Lab ID:	215072-011	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	4.0	D1
Chloromethane	ND	4.0	D1
Vinyl Chloride	ND	2.0	D1
Bromomethane	ND	4.0	D1 V9
Chloroethane	ND	4.0	D1
Trichlorofluoromethane	ND	4.0	D1
Iodomethane	ND	40	D1
Acetone	ND	40	D1
1,1-Dichloroethene	23	2.0	D1
Methylene Chloride	ND	40	D1
Carbon Disulfide	ND	2.0	D1
MTBE	ND	2.0	D1
trans-1,2-Dichloroethene	ND	2.0	D1
Vinyl Acetate	ND	40	D1 L1 R2 V1
1,1-Dichloroethane	ND	2.0	D1
2-Butanone	ND	40	D1
cis-1,2-Dichloroethene	97	2.0	D1
2,2-Dichloropropane	ND	2.0	D1 L1 V1
Chloroform	2.5	2.0	D1
Bromochloromethane	ND	2.0	D1
1,1,1-Trichloroethane	ND	2.0	D1
1,1-Dichloropropene	ND	2.0	D1
Carbon Tetrachloride	ND	2.0	D1 L1
1,2-Dichloroethane	ND	2.0	D1
Benzene	ND	2.0	D1
Trichloroethene	200	2.0	D1
1,2-Dichloropropane	ND	2.0	D1
Bromodichloromethane	ND	2.0	D1
Dibromomethane	ND	2.0	D1
4-Methyl-2-Pentanone	ND	40	D1
cis-1,3-Dichloropropene	ND	2.0	D1
Toluene	ND	2.0	D1
trans-1,3-Dichloropropene	ND	2.0	D1
1,1,2-Trichloroethane	ND	2.0	D1
2-Hexanone	ND	40	D1
1,3-Dichloropropane	ND	2.0	D1
Tetrachloroethene	13	2.0	D1

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PZ-1B-9C1	Batch#:	155479
Lab ID:	215072-011	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	4.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	2.0	D1
1,2-Dibromoethane	ND	2.0	D1
Chlorobenzene	ND	2.0	D1
1,1,1,2-Tetrachloroethane	ND	2.0	D1
Ethylbenzene	ND	2.0	D1
m,p-Xylenes	ND	2.0	D1
o-Xylene	ND	2.0	D1
Styrene	ND	2.0	D1
Bromoform	ND	4.0	D1
Isopropylbenzene	ND	2.0	D1
1,1,2,2-Tetrachloroethane	ND	2.0	D1
1,2,3-Trichloropropane	ND	2.0	D1
Propylbenzene	ND	2.0	D1
Bromobenzene	ND	2.0	D1
1,3,5-Trimethylbenzene	ND	2.0	D1
2-Chlorotoluene	ND	2.0	D1
4-Chlorotoluene	ND	2.0	D1
tert-Butylbenzene	ND	2.0	D1
1,2,4-Trimethylbenzene	ND	2.0	D1
sec-Butylbenzene	ND	2.0	D1 L1 V1
para-Isopropyl Toluene	ND	2.0	D1
1,3-Dichlorobenzene	ND	2.0	D1
1,4-Dichlorobenzene	ND	2.0	D1
n-Butylbenzene	ND	2.0	D1 L1 V1
1,2-Dichlorobenzene	ND	2.0	D1
1,2-Dibromo-3-Chloropropane	ND	8.0	D1
1,2,4-Trichlorobenzene	ND	2.0	D1
Hexachlorobutadiene	ND	8.0	D1
Naphthalene	ND	8.0	D1
1,2,3-Trichlorobenzene	ND	2.0	D1
Xylene (total)	ND	2.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	115	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PZ-1A-9C1	Batch#:	155514
Lab ID:	215072-012	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	2.8	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	9.6	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	3.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	30	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	3.0	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PZ-1A-9C1	Batch#:	155514
Lab ID:	215072-012	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514336	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	29.42	118	56-140	
Chloromethane	25.00	29.16	117	46-142	
Vinyl Chloride	25.00	28.95	116	49-136	
Bromomethane	25.00	32.06 b	128	42-154	V3
Chloroethane	25.00	21.65	87	51-133	
Trichlorofluoromethane	25.00	27.41	110	63-135	
Iodomethane	25.00	41.07 b	164 *	70-130	L1 V3
Acetone	25.00	29.16	117	48-130	
1,1-Dichloroethene	25.00	29.31	117	68-133	
Methylene Chloride	25.00	28.00	112	71-120	
Carbon Disulfide	25.00	26.72	107	56-120	
MTBE	25.00	27.01	108	58-120	
trans-1,2-Dichloroethene	25.00	30.53 b	122 *	80-120	L1 V3
Vinyl Acetate	25.00	24.91	100	63-124	
1,1-Dichloroethane	25.00	27.10	108	77-120	
2-Butanone	25.00	27.95	112	57-120	
cis-1,2-Dichloroethene	25.00	28.75	115	75-120	
2,2-Dichloropropane	25.00	28.51	114	72-128	
Chloroform	25.00	26.99	108	78-120	
Bromochloromethane	25.00	30.02	120	78-120	
1,1,1-Trichloroethane	25.00	29.36	117	78-120	
1,1-Dichloropropene	25.00	26.74	107	75-120	
Carbon Tetrachloride	25.00	27.30	109	80-120	
1,2-Dichloroethane	25.00	25.00	100	74-120	
Benzene	25.00	26.86	107	77-120	
Trichloroethene	25.00	29.09	116	78-122	
1,2-Dichloropropane	25.00	25.90	104	76-120	
Bromodichloromethane	25.00	28.36	113	78-120	
Dibromomethane	25.00	27.85	111	77-120	
4-Methyl-2-Pentanone	25.00	24.13	97	65-120	
cis-1,3-Dichloropropene	25.00	29.12	116	76-120	
Toluene	25.00	24.03	96	73-120	
trans-1,3-Dichloropropene	25.00	21.85	87	72-120	
1,1,2-Trichloroethane	25.00	23.67	95	76-120	
2-Hexanone	25.00	22.10	88	57-121	
1,3-Dichloropropane	25.00	23.33	93	75-120	
Tetrachloroethene	25.00	24.97	100	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514336	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	25.31	101	76-120	
1,2-Dibromoethane	25.00	24.66	99	77-120	
Chlorobenzene	25.00	23.94	96	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.61	98	77-120	
Ethylbenzene	25.00	24.57	98	78-120	
m,p-Xylenes	50.00	47.29	95	77-120	
o-Xylene	25.00	23.01	92	77-120	
Styrene	25.00	24.02	96	77-120	
Bromoform	25.00	23.05	92	74-121	
Isopropylbenzene	25.00	23.44	94	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.36	101	73-120	
1,2,3-Trichloropropane	25.00	27.85	111	72-120	
Propylbenzene	25.00	22.42	90	76-120	
Bromobenzene	25.00	28.74	115	75-120	
1,3,5-Trimethylbenzene	25.00	28.44	114	77-120	
2-Chlorotoluene	25.00	26.66	107	76-120	
4-Chlorotoluene	25.00	24.53	98	78-120	
tert-Butylbenzene	25.00	20.39	82	76-120	
1,2,4-Trimethylbenzene	25.00	29.74	119	77-120	
sec-Butylbenzene	25.00	20.49	82	80-120	
para-Isopropyl Toluene	25.00	25.51	102	76-120	
1,3-Dichlorobenzene	25.00	25.07	100	75-120	
1,4-Dichlorobenzene	25.00	23.95	96	77-120	
n-Butylbenzene	25.00	36.35 b	145 *	76-120	L1 V3
1,2-Dichlorobenzene	25.00	25.40	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.01	100	65-120	
1,2,4-Trichlorobenzene	25.00	30.19 b	121	73-121	V3
Hexachlorobutadiene	25.00	23.88	96	73-123	
Naphthalene	25.00	32.85 b	131 *	62-121	L1 V3
1,2,3-Trichlorobenzene	25.00	31.62 b	126 *	66-123	L1 V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	89	83-125	
Bromofluorobenzene	113	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514337	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V1
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L1 V1
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	L1 V1
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514337	Batch#:	155470
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	V1
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1 V1
1,2,3-Trichlorobenzene	ND	0.5	L1 V1
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	90	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514372	Batch#:	155479
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 R2 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	L1 V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514372	Batch#:	155479
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1 V1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	L1 V1
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514373

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	18.75	20.18	108	56-140	
Chloromethane	18.75	16.19	86	46-142	
Vinyl Chloride	18.75	17.71	94	49-136	
Bromomethane	18.75	12.81 b	68	42-154	V9
Chloroethane	18.75	18.40	98	51-133	
Trichlorofluoromethane	18.75	21.14	113	63-135	
Iodomethane	18.75	17.40 b	93	70-130	
Acetone	18.75	15.03 b	80	48-130	
1,1-Dichloroethene	18.75	20.36	109	68-133	
Methylene Chloride	18.75	19.06	102	71-120	
Carbon Disulfide	18.75	17.78	95	56-120	
MTBE	18.75	18.99	101	58-120	
trans-1,2-Dichloroethene	18.75	20.55	110	80-120	
Vinyl Acetate	18.75	27.11 b	145 *	63-124	L1 R2 V3
1,1-Dichloroethane	18.75	20.01	107	77-120	
2-Butanone	18.75	17.18	92	57-120	
cis-1,2-Dichloroethene	18.75	19.22	103	75-120	
2,2-Dichloropropane	18.75	27.54 b	147 *	72-128	L1 V3
Chloroform	18.75	19.86	106	78-120	
Bromochloromethane	18.75	20.03	107	78-120	
1,1,1-Trichloroethane	18.75	22.15	118	78-120	
1,1-Dichloropropene	18.75	22.00	117	75-120	
Carbon Tetrachloride	18.75	22.55	120	80-120	
1,2-Dichloroethane	18.75	20.48	109	74-120	
Benzene	18.75	19.91	106	77-120	
Trichloroethene	18.75	19.51	104	78-122	
1,2-Dichloropropane	18.75	19.97	106	76-120	
Bromodichloromethane	18.75	20.55	110	78-120	
Dibromomethane	18.75	20.75	111	77-120	
4-Methyl-2-Pentanone	18.75	19.71	105	65-120	
cis-1,3-Dichloropropene	18.75	21.68	116	76-120	
Toluene	18.75	19.46	104	73-120	
trans-1,3-Dichloropropene	18.75	19.82	106	72-120	
1,1,2-Trichloroethane	18.75	20.45	109	76-120	
2-Hexanone	18.75	19.09	102	57-121	
1,3-Dichloropropane	18.75	20.62	110	75-120	
Tetrachloroethene	18.75	21.91	117	77-120	
Dibromochloromethane	18.75	20.62	110	76-120	
1,2-Dibromoethane	18.75	20.85	111	77-120	
Chlorobenzene	18.75	20.28	108	78-120	
1,1,1,2-Tetrachloroethane	18.75	20.86	111	77-120	
Ethylbenzene	18.75	21.01	112	78-120	
m,p-Xylenes	37.50	41.47	111	77-120	
o-Xylene	18.75	20.46	109	77-120	
Styrene	18.75	20.21	108	77-120	
Bromoform	18.75	19.85	106	74-121	
Isopropylbenzene	18.75	18.78	100	71-120	
1,1,2,2-Tetrachloroethane	18.75	21.92	117	73-120	
1,2,3-Trichloropropane	18.75	20.89	111	72-120	
Propylbenzene	18.75	21.76	116	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	18.75	20.04	107	75-120	
1,3,5-Trimethylbenzene	18.75	21.22	113	77-120	
2-Chlorotoluene	18.75	20.90	111	76-120	
4-Chlorotoluene	18.75	20.28	108	78-120	
tert-Butylbenzene	18.75	21.79	116	76-120	
1,2,4-Trimethylbenzene	18.75	20.62	110	77-120	
sec-Butylbenzene	18.75	22.69 b	121 *	80-120	L1 V3
para-Isopropyl Toluene	18.75	21.00	112	76-120	
1,3-Dichlorobenzene	18.75	20.13	107	75-120	
1,4-Dichlorobenzene	18.75	19.99	107	77-120	
n-Butylbenzene	18.75	23.01 b	123 *	76-120	L1 V3
1,2-Dichlorobenzene	18.75	20.13	107	76-120	
1,2-Dibromo-3-Chloropropane	18.75	20.41	109	65-120	
1,2,4-Trichlorobenzene	18.75	19.50	104	73-121	
Hexachlorobutadiene	18.75	22.20 b	118	73-123	
Naphthalene	18.75	21.38	114	62-121	
1,2,3-Trichlorobenzene	18.75	20.26	108	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514374

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	18.75	19.89	106	56-140	1	24	
Chloromethane	18.75	16.50	88	46-142	2	24	
Vinyl Chloride	18.75	18.30	98	49-136	3	24	
Bromomethane	18.75	14.72 b	79	42-154	14	24	V9
Chloroethane	18.75	18.52	99	51-133	1	25	
Trichlorofluoromethane	18.75	21.30	114	63-135	1	20	
Iodomethane	18.75	17.29 b	92	70-130	1	20	
Acetone	18.75	14.84 b	79	48-130	1	41	
1,1-Dichloroethene	18.75	19.93	106	68-133	2	20	
Methylene Chloride	18.75	18.51	99	71-120	3	20	
Carbon Disulfide	18.75	17.26	92	56-120	3	20	
MTBE	18.75	18.70	100	58-120	2	21	
trans-1,2-Dichloroethene	18.75	20.29	108	80-120	1	24	
Vinyl Acetate	18.75	26.41 b	141 *	63-124	3	24	L1 R2 V3
1,1-Dichloroethane	18.75	19.84	106	77-120	1	20	
2-Butanone	18.75	17.26	92	57-120	0	32	
cis-1,2-Dichloroethene	18.75	19.20	102	75-120	0	20	
2,2-Dichloropropane	18.75	26.80 b	143 *	72-128	3	24	L1 V3
Chloroform	18.75	19.63	105	78-120	1	20	
Bromochloromethane	18.75	19.93	106	78-120	0	20	
1,1,1-Trichloroethane	18.75	21.31	114	78-120	4	20	
1,1-Dichloropropene	18.75	22.01	117	75-120	0	21	
Carbon Tetrachloride	18.75	22.99	123 *	80-120	2	21	L1
1,2-Dichloroethane	18.75	20.66	110	74-120	1	20	
Benzene	18.75	19.61	105	77-120	2	20	
Trichloroethene	18.75	19.04	102	78-122	2	20	
1,2-Dichloropropane	18.75	19.29	103	76-120	3	20	
Bromodichloromethane	18.75	20.07	107	78-120	2	20	
Dibromomethane	18.75	19.99	107	77-120	4	20	
4-Methyl-2-Pentanone	18.75	19.67	105	65-120	0	22	
cis-1,3-Dichloropropene	18.75	21.00	112	76-120	3	20	
Toluene	18.75	19.44	104	73-120	0	20	
trans-1,3-Dichloropropene	18.75	19.51	104	72-120	2	20	
1,1,2-Trichloroethane	18.75	20.58	110	76-120	1	20	
2-Hexanone	18.75	18.99	101	57-121	1	25	
1,3-Dichloropropane	18.75	20.75	111	75-120	1	20	
Tetrachloroethene	18.75	22.19	118	77-120	1	20	
Dibromochloromethane	18.75	20.81	111	76-120	1	20	
1,2-Dibromoethane	18.75	20.50	109	77-120	2	20	
Chlorobenzene	18.75	20.16	108	78-120	1	20	
1,1,1,2-Tetrachloroethane	18.75	20.86	111	77-120	0	20	
Ethylbenzene	18.75	20.81	111	78-120	1	26	
m,p-Xylenes	37.50	40.95	109	77-120	1	20	
o-Xylene	18.75	20.14	107	77-120	2	20	
Styrene	18.75	20.08	107	77-120	1	20	
Bromoform	18.75	19.96	106	74-121	1	21	
Isopropylbenzene	18.75	18.28	98	71-120	3	20	
1,1,2,2-Tetrachloroethane	18.75	21.38	114	73-120	3	20	
1,2,3-Trichloropropane	18.75	20.10	107	72-120	4	20	
Propylbenzene	18.75	20.91	111	76-120	4	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155479
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	18.75	19.89	106	75-120	1	20	
1,3,5-Trimethylbenzene	18.75	20.85	111	77-120	2	20	
2-Chlorotoluene	18.75	20.66	110	76-120	1	20	
4-Chlorotoluene	18.75	19.68	105	78-120	3	20	
tert-Butylbenzene	18.75	21.30	114	76-120	2	21	
1,2,4-Trimethylbenzene	18.75	20.50	109	77-120	1	20	
sec-Butylbenzene	18.75	21.87 b	117	80-120	4	21	V3
para-Isopropyl Toluene	18.75	20.44	109	76-120	3	20	
1,3-Dichlorobenzene	18.75	19.64	105	75-120	2	20	
1,4-Dichlorobenzene	18.75	19.71	105	77-120	1	23	
n-Butylbenzene	18.75	22.45 b	120	76-120	2	21	V3
1,2-Dichlorobenzene	18.75	19.73	105	76-120	2	20	
1,2-Dibromo-3-Chloropropane	18.75	20.46	109	65-120	0	22	
1,2,4-Trichlorobenzene	18.75	19.25	103	73-121	1	20	
Hexachlorobutadiene	18.75	22.96 b	122	73-123	3	25	
Naphthalene	18.75	21.17	113	62-121	1	32	
1,2,3-Trichlorobenzene	18.75	20.23	108	66-123	0	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514399

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	31.78	127	56-140	
Chloromethane	<0.2000	25.00	29.29	117	46-142	
Vinyl Chloride	1.810	25.00	30.06	113	49-136	
Bromomethane	<0.2000	25.00	25.11 b	100	42-154	V3
Chloroethane	2.309	25.00	23.74	86	51-133	
Trichlorofluoromethane	<0.2000	25.00	29.81	119	63-135	
Iodomethane	<2.000	25.00	28.99 b	116	60-140	V3
Acetone	<1.000	25.00	27.61	110	48-130	
1,1-Dichloroethene	5.472	25.00	36.43	124	68-133	
Methylene Chloride	0.2151	25.00	29.15	116	71-120	
Carbon Disulfide	<0.1000	25.00	28.20	113	56-120	
MTBE	60.19	25.00	86.99	107	58-120	
trans-1,2-Dichloroethene	<0.1000	25.00	33.05 b	132 *	80-120	M1 V3
Vinyl Acetate	<2.000	25.00	21.96	88	63-124	
1,1-Dichloroethane	18.24	25.00	45.63	110	77-120	
2-Butanone	<2.000	25.00	25.41	102	57-120	
cis-1,2-Dichloroethene	1.035	25.00	30.79	119	75-120	
2,2-Dichloropropane	<0.1000	25.00	27.32	109	72-128	
Chloroform	0.1945	25.00	28.89	115	78-120	
Bromochloromethane	<0.1000	25.00	31.92	127 *	78-120	M1
1,1,1-Trichloroethane	4.478	25.00	36.95	130 *	78-120	M1
1,1-Dichloropropene	<0.1000	25.00	27.58	110	75-120	
Carbon Tetrachloride	<0.1000	25.00	30.23	121 *	80-120	M1
1,2-Dichloroethane	<0.1000	25.00	26.24	105	74-120	
Benzene	48.53	25.00	69.86	85	77-120	
Trichloroethene	3.187	25.00	32.98	119	78-122	
1,2-Dichloropropane	<0.1000	25.00	25.84	103	76-120	
Bromodichloromethane	<0.1000	25.00	29.14	116	78-120	
Dibromomethane	<0.1000	25.00	28.15	113	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	23.62	94	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	28.37	113	76-120	
Toluene	<0.1000	25.00	23.81	95	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	21.03	84	72-120	
1,1,2-Trichloroethane	<0.1075	25.00	23.55	94	76-120	
2-Hexanone	<2.000	25.00	17.56	70	57-121	
1,3-Dichloropropane	<0.1000	25.00	23.26	93	75-120	
Tetrachloroethene	0.1528	25.00	25.34	101	77-120	
Dibromochloromethane	<0.1000	25.00	25.37	101	76-120	
1,2-Dibromoethane	<0.1000	25.00	24.56	98	77-120	
Chlorobenzene	<0.1000	25.00	23.57	94	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.64	99	77-120	
Ethylbenzene	0.2945	25.00	24.86	98	78-120	
m,p-Xylenes	<0.1594	50.00	49.13	98	77-120	
o-Xylene	0.4831	25.00	24.38	96	77-120	
Styrene	<0.1000	25.00	24.58	98	77-120	
Bromoform	<0.2000	25.00	23.55	91	74-121	
Isopropylbenzene	10.22	25.00	33.28	92	71-120	
1,1,2,2-Tetrachloroethane	<0.1000	25.00	23.83	95	73-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1070	25.00	26.61	106	72-120	
Propylbenzene	6.772	25.00	29.50	91	76-120	
Bromobenzene	<0.1000	25.00	27.14	109	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.13	105	77-120	
2-Chlorotoluene	<0.1000	25.00	25.92	104	76-120	
4-Chlorotoluene	<0.1000	25.00	24.23	97	78-120	
tert-Butylbenzene	0.4269	25.00	21.46	84	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.86	107	77-120	
sec-Butylbenzene	3.049	25.00	22.93	80	80-120	
para-Isopropyl Toluene	<0.1000	25.00	23.41	94	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.36	97	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	23.26	93	77-120	
n-Butylbenzene	4.694	25.00	39.97 b	141 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	24.70	99	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.21	94	65-120	
1,2,4-Trichlorobenzene	<0.1329	25.00	26.84 b	107	73-121	V3
Hexachlorobutadiene	<0.4000	25.00	23.51	94	73-123	
Naphthalene	17.64	25.00	43.89 b	105	62-121	V3
1,2,3-Trichlorobenzene	<0.1149	25.00	28.56 b	114	66-123	V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	109	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC514400

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	28.18	113	56-140	12	24	
Chloromethane	25.00	28.34	113	46-142	3	24	
Vinyl Chloride	25.00	28.58	107	49-136	5	24	
Bromomethane	25.00	26.90 b	108	42-154	7	24	V3
Chloroethane	25.00	22.49	81	51-133	5	25	
Trichlorofluoromethane	25.00	26.74	107	63-135	11	20	
Iodomethane	25.00	32.94 b	132	60-140	13	30	V3
Acetone	25.00	24.46	98	48-130	12	41	
1,1-Dichloroethene	25.00	33.78	113	68-133	8	20	
Methylene Chloride	25.00	27.20	108	71-120	7	20	
Carbon Disulfide	25.00	26.02	104	56-120	8	20	
MTBE	25.00	83.06	91	58-120	5	21	
trans-1,2-Dichloroethene	25.00	29.96 b	120	80-120	10	24	V3
Vinyl Acetate	25.00	20.41	82	63-124	7	24	
1,1-Dichloroethane	25.00	41.99	95	77-120	8	20	
2-Butanone	25.00	24.15	97	57-120	5	32	
cis-1,2-Dichloroethene	25.00	29.01	112	75-120	6	20	
2,2-Dichloropropane	25.00	24.65	99	72-128	10	24	
Chloroform	25.00	26.48	105	78-120	9	20	
Bromochloromethane	25.00	30.48	121 *	78-120	5	20	M1
1,1,1-Trichloroethane	25.00	33.40	116	78-120	10	20	
1,1-Dichloropropene	25.00	26.03	104	75-120	6	21	
Carbon Tetrachloride	25.00	27.80	111	80-120	8	21	
1,2-Dichloroethane	25.00	24.17	97	74-120	8	20	
Benzene	25.00	67.27	75 *	77-120	4	20	M2
Trichloroethene	25.00	31.24	112	78-122	5	20	
1,2-Dichloropropane	25.00	24.84	99	76-120	4	20	
Bromodichloromethane	25.00	27.71	110	78-120	5	20	
Dibromomethane	25.00	27.05	108	77-120	4	20	
4-Methyl-2-Pentanone	25.00	22.91	92	65-120	3	22	
cis-1,3-Dichloropropene	25.00	27.42	110	76-120	3	20	
Toluene	25.00	22.49	90	73-120	6	20	
trans-1,3-Dichloropropene	25.00	20.04	80	72-120	5	20	
1,1,2-Trichloroethane	25.00	22.20	89	76-120	6	20	
2-Hexanone	25.00	17.52	70	57-121	0	25	
1,3-Dichloropropane	25.00	21.92	88	75-120	6	20	
Tetrachloroethene	25.00	24.12	96	77-120	5	20	
Dibromochloromethane	25.00	24.08	96	76-120	5	20	
1,2-Dibromoethane	25.00	23.65	95	77-120	4	20	
Chlorobenzene	25.00	22.56	90	78-120	4	20	
1,1,1,2-Tetrachloroethane	25.00	23.08	92	77-120	7	20	
Ethylbenzene	25.00	23.75	94	78-120	5	26	
m,p-Xylenes	50.00	47.35	95	77-120	4	20	
o-Xylene	25.00	23.72	93	77-120	3	20	
Styrene	25.00	23.96	96	77-120	3	20	
Bromoform	25.00	22.67	88	74-121	4	21	
Isopropylbenzene	25.00	30.34	80	71-120	9	20	
1,1,2,2-Tetrachloroethane	25.00	21.46	85	73-120	10	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-9C1	Batch#:	155470
MSS Lab ID:	215064-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,2,3-Trichloropropane	25.00	23.13	93	72-120	14	20	
Propylbenzene	25.00	28.07	85	76-120	5	20	
Bromobenzene	25.00	25.41	102	75-120	7	20	
1,3,5-Trimethylbenzene	25.00	24.47	98	77-120	7	20	
2-Chlorotoluene	25.00	23.65	95	76-120	9	20	
4-Chlorotoluene	25.00	22.57	90	78-120	7	20	
tert-Butylbenzene	25.00	20.89	82	76-120	3	21	
1,2,4-Trimethylbenzene	25.00	24.73	99	77-120	8	20	
sec-Butylbenzene	25.00	22.63	78 *	80-120	1	21	M2
para-Isopropyl Toluene	25.00	22.75	91	76-120	3	20	
1,3-Dichlorobenzene	25.00	23.04	92	75-120	6	20	
1,4-Dichlorobenzene	25.00	22.12	88	77-120	5	23	
n-Butylbenzene	25.00	36.56 b	127 *	76-120	9	21	M1 V3
1,2-Dichlorobenzene	25.00	23.51	94	76-120	5	20	
1,2-Dibromo-3-Chloropropane	25.00	21.78	85	65-120	11	22	
1,2,4-Trichlorobenzene	25.00	25.02 b	100	73-121	7	20	V3
Hexachlorobutadiene	25.00	23.00	92	73-123	2	25	
Naphthalene	25.00	40.57 b	92	62-121	8	32	V3
1,2,3-Trichlorobenzene	25.00	26.47 b	106	66-123	8	29	V3

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	87	83-125	
Bromofluorobenzene	103	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514447

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.2000	25.00	32.14	129	56-140	
Chloromethane	<0.2000	25.00	23.82	95	46-142	
Vinyl Chloride	0.2459	25.00	25.56	101	49-136	
Bromomethane	<0.2354	25.00	18.98 b	76	42-154	V9
Chloroethane	<0.2000	25.00	24.86	99	51-133	
Trichlorofluoromethane	<0.2000	25.00	29.44	118	63-135	
Iodomethane	ND	25.00	23.09 b	92	60-140	
Acetone	<1.000	25.00	18.53 b	74	48-130	
1,1-Dichloroethene	20.10	25.00	47.91	111	68-133	
Methylene Chloride	0.3501	25.00	26.57	105	71-120	
Carbon Disulfide	<0.1000	25.00	25.92	104	56-120	
MTBE	0.2050	25.00	25.18	100	58-120	
trans-1,2-Dichloroethene	0.2732	25.00	29.34	116	80-120	
Vinyl Acetate	<2.000	25.00	32.45 b	130 *	63-124	M1 R2 V3
1,1-Dichloroethane	14.18	25.00	42.12	112	77-120	
2-Butanone	<2.000	25.00	21.43	86	57-120	
cis-1,2-Dichloroethene	21.91	25.00	49.57	111	75-120	
2,2-Dichloropropane	<0.1000	25.00	37.84 b	151 *	72-128	M1 V3
Chloroform	0.4415	25.00	28.55	112	78-120	
Bromochloromethane	<0.1000	25.00	27.96	112	78-120	
1,1,1-Trichloroethane	<0.1000	25.00	32.02	128 *	78-120	M1
1,1-Dichloropropene	<0.1348	25.00	31.70	127 *	75-120	M1
Carbon Tetrachloride	<0.1000	25.00	32.29	129 *	80-120	M1
1,2-Dichloroethane	0.2166	25.00	28.03	111	74-120	
Benzene	<0.1000	25.00	27.63	111	77-120	
Trichloroethene	83.86	25.00	103.7 >LR b	79	78-122	
1,2-Dichloropropane	<0.1181	25.00	26.98	108	76-120	
Bromodichloromethane	<0.1000	25.00	28.07	112	78-120	
Dibromomethane	<0.1043	25.00	26.64	107	77-120	
4-Methyl-2-Pentanone	<2.000	25.00	23.11	92	65-120	
cis-1,3-Dichloropropene	<0.1000	25.00	28.00	112	76-120	
Toluene	<0.1000	25.00	26.35	105	73-120	
trans-1,3-Dichloropropene	<0.1000	25.00	24.30	97	72-120	
1,1,2-Trichloroethane	<0.1321	25.00	26.79	107	76-120	
2-Hexanone	<2.000	25.00	22.16	89	57-121	
1,3-Dichloropropane	<0.1000	25.00	27.13	109	75-120	
Tetrachloroethene	1.309	25.00	31.49	121 *	77-120	M1
Dibromochloromethane	<0.1000	25.00	26.25	105	76-120	
1,2-Dibromoethane	<0.1010	25.00	26.33	105	77-120	
Chlorobenzene	<0.1000	25.00	27.17	109	78-120	
1,1,1,2-Tetrachloroethane	<0.1000	25.00	27.78	111	77-120	
Ethylbenzene	<0.1000	25.00	28.59	114	78-120	
m,p-Xylenes	<0.1595	50.00	56.24	112	77-120	
o-Xylene	<0.1000	25.00	27.38	110	77-120	
Styrene	<0.1000	25.00	27.02	108	77-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Bromoform	<0.2000	25.00	22.84	91	74-121	
Isopropylbenzene	<0.1003	25.00	25.79	103	71-120	
1,1,2,2-Tetrachloroethane	<0.1203	25.00	28.29	113	73-120	
1,2,3-Trichloropropane	<0.1044	25.00	26.39	106	72-120	
Propylbenzene	<0.1085	25.00	29.83	119	76-120	
Bromobenzene	<0.1000	25.00	27.49	110	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	28.89	116	77-120	
2-Chlorotoluene	<0.1000	25.00	28.63	115	76-120	
4-Chlorotoluene	<0.1000	25.00	27.74	111	78-120	
tert-Butylbenzene	<0.1000	25.00	29.42	118	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	28.03	112	77-120	
sec-Butylbenzene	<0.1048	25.00	30.41 b	122 *	80-120	M1 V3
para-Isopropyl Toluene	<0.1170	25.00	28.60	114	76-120	
1,3-Dichlorobenzene	<0.1161	25.00	27.01	108	75-120	
1,4-Dichlorobenzene	<0.1148	25.00	26.32	105	77-120	
n-Butylbenzene	<0.1076	25.00	30.52 b	122 *	76-120	M1 V3
1,2-Dichlorobenzene	<0.1000	25.00	26.84	107	76-120	
1,2-Dibromo-3-Chloropropane	<0.4000	25.00	24.25	97	65-120	
1,2,4-Trichlorobenzene	<0.1359	25.00	24.58	98	73-121	
Hexachlorobutadiene	<0.4000	25.00	29.41 b	118	73-123	
Naphthalene	<0.4000	25.00	25.88	104	62-121	
1,2,3-Trichlorobenzene	<0.1460	25.00	25.23	101	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Type: MSD Lab ID: QC514448

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	25.00	30.05	120	56-140	7	24	
Chloromethane	25.00	22.07	88	46-142	8	24	
Vinyl Chloride	25.00	24.67	98	49-136	4	24	
Bromomethane	25.00	21.48 b	86	42-154	12	24	V9
Chloroethane	25.00	23.78	95	51-133	4	25	
Trichlorofluoromethane	25.00	27.99	112	63-135	5	20	
Iodomethane	25.00	20.86 b	83	60-140	10	30	
Acetone	25.00	17.07 b	68	48-130	8	41	
1,1-Dichloroethene	25.00	44.99	100	68-133	6	20	
Methylene Chloride	25.00	25.22	99	71-120	5	20	
Carbon Disulfide	25.00	23.87	95	56-120	8	20	
MTBE	25.00	23.73	94	58-120	6	21	
trans-1,2-Dichloroethene	25.00	27.27	108	80-120	7	24	
Vinyl Acetate	25.00	28.90 b	116	63-124	12	24	R2 V3
1,1-Dichloroethane	25.00	38.90	99	77-120	8	20	
2-Butanone	25.00	20.03	80	57-120	7	32	
cis-1,2-Dichloroethene	25.00	45.17	93	75-120	9	20	
2,2-Dichloropropane	25.00	33.77 b	135 *	72-128	11	24	M1 V3
Chloroform	25.00	25.92	102	78-120	10	20	
Bromochloromethane	25.00	25.54	102	78-120	9	20	
1,1,1-Trichloroethane	25.00	29.66	119	78-120	8	20	
1,1-Dichloropropene	25.00	30.45	122 *	75-120	4	21	M1
Carbon Tetrachloride	25.00	31.95	128 *	80-120	1	21	M1
1,2-Dichloroethane	25.00	27.23	108	74-120	3	20	
Benzene	25.00	26.71	107	77-120	3	20	
Trichloroethene	25.00	100.8 >LR b	68 *	78-122	NC	20	M2
1,2-Dichloropropane	25.00	26.28	105	76-120	3	20	
Bromodichloromethane	25.00	26.78	107	78-120	5	20	
Dibromomethane	25.00	26.62	106	77-120	0	20	
4-Methyl-2-Pentanone	25.00	23.57	94	65-120	2	22	
cis-1,3-Dichloropropene	25.00	26.78	107	76-120	4	20	
Toluene	25.00	26.12	104	73-120	1	20	
trans-1,3-Dichloropropene	25.00	23.64	95	72-120	3	20	
1,1,2-Trichloroethane	25.00	26.47	106	76-120	1	20	
2-Hexanone	25.00	22.06	88	57-121	0	25	
1,3-Dichloropropane	25.00	26.43	106	75-120	3	20	
Tetrachloroethene	25.00	31.20	120	77-120	1	20	
Dibromochloromethane	25.00	25.62	102	76-120	2	20	
1,2-Dibromoethane	25.00	25.90	104	77-120	2	20	
Chlorobenzene	25.00	26.57	106	78-120	2	20	
1,1,1,2-Tetrachloroethane	25.00	27.32	109	77-120	2	20	
Ethylbenzene	25.00	27.93	112	78-120	2	26	
m,p-Xylenes	50.00	54.53	109	77-120	3	20	
o-Xylene	25.00	26.79	107	77-120	2	20	
Styrene	25.00	26.70	107	77-120	1	20	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-73C-9C1	Batch#:	155479
MSS Lab ID:	215072-003	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	09/30/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromoform	25.00	22.34	89	74-121	2	21	
Isopropylbenzene	25.00	25.01	100	71-120	3	20	
1,1,2,2-Tetrachloroethane	25.00	26.87	107	73-120	5	20	
1,2,3-Trichloropropane	25.00	25.40	102	72-120	4	20	
Propylbenzene	25.00	28.45	114	76-120	5	20	
Bromobenzene	25.00	26.42	106	75-120	4	20	
1,3,5-Trimethylbenzene	25.00	27.66	111	77-120	4	20	
2-Chlorotoluene	25.00	27.48	110	76-120	4	20	
4-Chlorotoluene	25.00	26.38	106	78-120	5	20	
tert-Butylbenzene	25.00	28.39	114	76-120	4	21	
1,2,4-Trimethylbenzene	25.00	26.62	106	77-120	5	20	
sec-Butylbenzene	25.00	29.33 b	117	80-120	4	21	V3
para-Isopropyl Toluene	25.00	27.39	110	76-120	4	20	
1,3-Dichlorobenzene	25.00	25.84	103	75-120	4	20	
1,4-Dichlorobenzene	25.00	25.39	102	77-120	4	23	
n-Butylbenzene	25.00	29.35 b	117	76-120	4	21	V3
1,2-Dichlorobenzene	25.00	25.53	102	76-120	5	20	
1,2-Dibromo-3-Chloropropane	25.00	24.04	96	65-120	1	22	
1,2,4-Trichlorobenzene	25.00	24.04	96	73-121	2	20	
Hexachlorobutadiene	25.00	29.48 b	118	73-123	0	25	
Naphthalene	25.00	25.91	104	62-121	0	32	
1,2,3-Trichlorobenzene	25.00	25.11	100	66-123	0	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
ND= Not Detected
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514489	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514489	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	L1
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514490	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	27.51	110	56-140	
Chloromethane	25.00	24.63	99	46-142	
Vinyl Chloride	25.00	24.66	99	49-136	
Bromomethane	25.00	25.23	101	42-154	
Chloroethane	25.00	24.55 b	98	51-133	V3
Trichlorofluoromethane	25.00	26.09	104	63-135	
Iodomethane	25.00	27.16	109	70-130	
Acetone	25.00	28.27	113	48-130	
1,1-Dichloroethene	25.00	25.34	101	68-133	
Methylene Chloride	25.00	24.75	99	71-120	
Carbon Disulfide	25.00	20.99	84	56-120	
MTBE	25.00	25.35	101	58-120	
trans-1,2-Dichloroethene	25.00	26.21	105	80-120	
Vinyl Acetate	25.00	26.14	105	63-124	
1,1-Dichloroethane	25.00	25.76	103	77-120	
2-Butanone	25.00	28.00	112	57-120	
cis-1,2-Dichloroethene	25.00	25.48	102	75-120	
2,2-Dichloropropane	25.00	26.68	107	72-128	
Chloroform	25.00	25.11	100	78-120	
Bromochloromethane	25.00	26.53	106	78-120	
1,1,1-Trichloroethane	25.00	26.19	105	78-120	
1,1-Dichloropropene	25.00	27.10	108	75-120	
Carbon Tetrachloride	25.00	26.72	107	80-120	
1,2-Dichloroethane	25.00	26.79	107	74-120	
Benzene	25.00	25.76	103	77-120	
Trichloroethene	25.00	25.89	104	78-122	
1,2-Dichloropropane	25.00	25.72	103	76-120	
Bromodichloromethane	25.00	26.63	107	78-120	
Dibromomethane	25.00	27.06	108	77-120	
4-Methyl-2-Pentanone	25.00	27.46	110	65-120	
cis-1,3-Dichloropropene	25.00	27.96	112	76-120	
Toluene	25.00	25.10	100	73-120	
trans-1,3-Dichloropropene	25.00	25.70	103	72-120	
1,1,2-Trichloroethane	25.00	27.83	111	76-120	
2-Hexanone	25.00	27.59	110	57-121	
1,3-Dichloropropane	25.00	27.90	112	75-120	
Tetrachloroethene	25.00	26.96	108	77-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514490	Batch#:	155514
Matrix:	Water	Analyzed:	09/30/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	27.71	111	76-120	
1,2-Dibromoethane	25.00	27.89	112	77-120	
Chlorobenzene	25.00	26.08	104	78-120	
1,1,1,2-Tetrachloroethane	25.00	26.58	106	77-120	
Ethylbenzene	25.00	26.32	105	78-120	
m,p-Xylenes	50.00	52.90	106	77-120	
o-Xylene	25.00	26.28	105	77-120	
Styrene	25.00	26.83	107	77-120	
Bromoform	25.00	28.39	114	74-121	
Isopropylbenzene	25.00	23.76	95	71-120	
1,1,2,2-Tetrachloroethane	25.00	28.40	114	73-120	
1,2,3-Trichloropropane	25.00	28.18	113	72-120	
Propylbenzene	25.00	26.88	108	76-120	
Bromobenzene	25.00	26.46	106	75-120	
1,3,5-Trimethylbenzene	25.00	26.84	107	77-120	
2-Chlorotoluene	25.00	26.40	106	76-120	
4-Chlorotoluene	25.00	25.98	104	78-120	
tert-Butylbenzene	25.00	27.34	109	76-120	
1,2,4-Trimethylbenzene	25.00	26.50	106	77-120	
sec-Butylbenzene	25.00	28.22	113	80-120	
para-Isopropyl Toluene	25.00	26.66	107	76-120	
1,3-Dichlorobenzene	25.00	26.24	105	75-120	
1,4-Dichlorobenzene	25.00	26.29	105	77-120	
n-Butylbenzene	25.00	28.82	115	76-120	
1,2-Dichlorobenzene	25.00	26.60	106	76-120	
1,2-Dibromo-3-Chloropropane	25.00	27.52	110	65-120	
1,2,4-Trichlorobenzene	25.00	26.65	107	73-121	
Hexachlorobutadiene	25.00	29.26	117	73-123	
Naphthalene	25.00	30.45	122 *	62-121	L1
1,2,3-Trichlorobenzene	25.00	28.11	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative
b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Type: MS Lab ID: QC514491

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	<0.8000	100.0	117.5	118	56-140	D1
Chloromethane	<0.8000	100.0	101.6	102	46-142	D1
Vinyl Chloride	<0.4216	100.0	104.7	105	49-136	D1
Bromomethane	<0.8000	100.0	60.72	61	42-154	D1
Chloroethane	<0.8000	100.0	104.8 b	105	51-133	D1 V3
Trichlorofluoromethane	<0.8000	100.0	111.9	112	63-135	D1
Iodomethane	ND	100.0	56.36	56 *	60-140	D1 M2
Acetone	<4.000	100.0	90.29	90	48-130	D1
1,1-Dichloroethene	<0.4158	100.0	107.2	107	68-133	D1
Methylene Chloride	<4.000	100.0	102.0	102	71-120	D1
Carbon Disulfide	<0.4000	100.0	87.28	87	56-120	D1
MTBE	<0.4000	100.0	101.6	102	58-120	D1
trans-1,2-Dichloroethene	<0.4000	100.0	108.6	109	80-120	D1
Vinyl Acetate	<8.000	100.0	104.9	105	63-124	D1
1,1-Dichloroethane	<0.4000	100.0	107.0	107	77-120	D1
2-Butanone	<8.000	100.0	103.0	103	57-120	D1
cis-1,2-Dichloroethene	<0.4000	100.0	104.0	104	75-120	D1
2,2-Dichloropropane	<0.5315	100.0	97.21	97	72-128	D1
Chloroform	<0.4000	100.0	103.3	103	78-120	D1
Bromochloromethane	<0.4893	100.0	106.7	107	78-120	D1
1,1,1-Trichloroethane	<0.5604	100.0	111.3	111	78-120	D1
1,1-Dichloropropene	<0.5258	100.0	112.1	112	75-120	D1
Carbon Tetrachloride	<0.5018	100.0	112.1	112	80-120	D1
1,2-Dichloroethane	<0.4000	100.0	108.8	109	74-120	D1
Benzene	<0.4000	100.0	105.1	105	77-120	D1
Trichloroethene	<0.5864	100.0	106.0	106	78-122	D1
1,2-Dichloropropane	<0.4000	100.0	102.6	103	76-120	D1
Bromodichloromethane	<0.4000	100.0	105.3	105	78-120	D1
Dibromomethane	<0.4000	100.0	108.1	108	77-120	D1
4-Methyl-2-Pentanone	<8.000	100.0	110.6	111	65-120	D1
cis-1,3-Dichloropropene	<0.4000	100.0	108.2	108	76-120	D1
Toluene	<0.4000	100.0	102.0	102	73-120	D1
trans-1,3-Dichloropropene	<0.4000	100.0	98.71	99	72-120	D1
1,1,2-Trichloroethane	<0.5843	100.0	110.9	111	76-120	D1
2-Hexanone	<8.000	100.0	105.4	105	57-121	D1
1,3-Dichloropropane	<0.4000	100.0	112.6	113	75-120	D1
Tetrachloroethene	<0.4712	100.0	108.2	108	77-120	D1
Dibromochloromethane	<0.4465	100.0	104.7	105	76-120	D1
1,2-Dibromoethane	<0.5468	100.0	109.9	110	77-120	D1
Chlorobenzene	<0.5164	100.0	103.5	103	78-120	D1
1,1,1,2-Tetrachloroethane	<0.6243	100.0	104.2	104	77-120	D1
Ethylbenzene	<0.6532	100.0	106.0	106	78-120	D1
m,p-Xylenes	<0.6367	200.0	213.3	107	77-120	D1
o-Xylene	<0.5886	100.0	104.2	104	77-120	D1
Styrene	<0.4424	100.0	105.2	105	77-120	D1
Bromoform	<1.054	100.0	103.6	104	74-121	D1
Isopropylbenzene	<0.4000	100.0	94.96	95	71-120	D1

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,1,2,2-Tetrachloroethane	<0.4992	100.0	112.9	113	73-120	D1
1,2,3-Trichloropropane	<0.5008	100.0	112.5	113	72-120	D1
Propylbenzene	<0.6556	100.0	107.3	107	76-120	D1
Bromobenzene	<0.6197	100.0	103.1	103	75-120	D1
1,3,5-Trimethylbenzene	<0.6167	100.0	106.5	107	77-120	D1
2-Chlorotoluene	<0.6302	100.0	104.9	105	76-120	D1
4-Chlorotoluene	<0.6198	100.0	102.3	102	78-120	D1
tert-Butylbenzene	<0.4392	100.0	108.4	108	76-120	D1
1,2,4-Trimethylbenzene	<0.5143	100.0	104.3	104	77-120	D1
sec-Butylbenzene	<0.4000	100.0	111.1	111	80-120	D1
para-Isopropyl Toluene	<0.4000	100.0	103.6	104	76-120	D1
1,3-Dichlorobenzene	<0.5361	100.0	101.8	102	75-120	D1
1,4-Dichlorobenzene	<0.6109	100.0	102.0	102	77-120	D1
n-Butylbenzene	<0.6564	100.0	110.2	110	76-120	D1
1,2-Dichlorobenzene	<0.5498	100.0	103.2	103	76-120	D1
1,2-Dibromo-3-Chloropropane	<1.600	100.0	106.3	106	65-120	D1
1,2,4-Trichlorobenzene	<0.5361	100.0	98.90	99	73-121	D1
Hexachlorobutadiene	<1.600	100.0	103.9	104	73-123	D1
Naphthalene	<1.600	100.0	118.3	118	62-121	D1
1,2,3-Trichlorobenzene	<0.4139	100.0	106.0	106	66-123	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Type: MSD Lab ID: QC514492

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	100.0	112.1	112	56-140	5	24	D1
Chloromethane	100.0	97.21	97	46-142	4	24	D1
Vinyl Chloride	100.0	98.37	98	49-136	6	24	D1
Bromomethane	100.0	71.11	71	42-154	16	24	D1
Chloroethane	100.0	99.41 b	99	51-133	5	25	D1 V3
Trichlorofluoromethane	100.0	107.3	107	63-135	4	20	D1
Iodomethane	100.0	70.04	70	60-140	22	30	D1
Acetone	100.0	89.01	89	48-130	1	41	D1
1,1-Dichloroethene	100.0	103.7	104	68-133	3	20	D1
Methylene Chloride	100.0	100.4	100	71-120	2	20	D1
Carbon Disulfide	100.0	84.13	84	56-120	4	20	D1
MTBE	100.0	100.5	100	58-120	1	21	D1
trans-1,2-Dichloroethene	100.0	105.7	106	80-120	3	24	D1
Vinyl Acetate	100.0	102.6	103	63-124	2	24	D1
1,1-Dichloroethane	100.0	104.4	104	77-120	2	20	D1
2-Butanone	100.0	100.5	101	57-120	2	32	D1
cis-1,2-Dichloroethene	100.0	101.6	102	75-120	2	20	D1
2,2-Dichloropropane	100.0	93.66	94	72-128	4	24	D1
Chloroform	100.0	101.8	102	78-120	1	20	D1
Bromochloromethane	100.0	104.3	104	78-120	2	20	D1
1,1,1-Trichloroethane	100.0	108.7	109	78-120	2	20	D1
1,1-Dichloropropene	100.0	108.2	108	75-120	4	21	D1
Carbon Tetrachloride	100.0	107.8	108	80-120	4	21	D1
1,2-Dichloroethane	100.0	107.3	107	74-120	1	20	D1
Benzene	100.0	101.9	102	77-120	3	20	D1
Trichloroethene	100.0	102.9	103	78-122	3	20	D1
1,2-Dichloropropane	100.0	101.1	101	76-120	1	20	D1
Bromodichloromethane	100.0	103.6	104	78-120	2	20	D1
Dibromomethane	100.0	106.1	106	77-120	2	20	D1
4-Methyl-2-Pentanone	100.0	105.4	105	65-120	5	22	D1
cis-1,3-Dichloropropene	100.0	106.9	107	76-120	1	20	D1
Toluene	100.0	99.43	99	73-120	3	20	D1
trans-1,3-Dichloropropene	100.0	96.84	97	72-120	2	20	D1
1,1,2-Trichloroethane	100.0	108.0	108	76-120	3	20	D1
2-Hexanone	100.0	102.6	103	57-121	3	25	D1
1,3-Dichloropropane	100.0	110.4	110	75-120	2	20	D1
Tetrachloroethene	100.0	104.6	105	77-120	3	20	D1
Dibromochloromethane	100.0	103.9	104	76-120	1	20	D1
1,2-Dibromoethane	100.0	108.0	108	77-120	2	20	D1
Chlorobenzene	100.0	101.6	102	78-120	2	20	D1
1,1,1,2-Tetrachloroethane	100.0	102.5	103	77-120	2	20	D1
Ethylbenzene	100.0	103.2	103	78-120	3	26	D1
m,p-Xylenes	200.0	206.8	103	77-120	3	20	D1
o-Xylene	100.0	101.6	102	77-120	2	20	D1
Styrene	100.0	103.3	103	77-120	2	20	D1
Bromoform	100.0	101.2	101	74-121	2	21	D1
Isopropylbenzene	100.0	92.84	93	71-120	2	20	D1

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-532-9C1	Batch#:	155514
MSS Lab ID:	215071-013	Sampled:	09/18/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	4.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,1,2,2-Tetrachloroethane	100.0	109.5	110	73-120	3	20	D1
1,2,3-Trichloropropane	100.0	110.0	110	72-120	2	20	D1
Propylbenzene	100.0	104.9	105	76-120	2	20	D1
Bromobenzene	100.0	101.9	102	75-120	1	20	D1
1,3,5-Trimethylbenzene	100.0	104.4	104	77-120	2	20	D1
2-Chlorotoluene	100.0	103.7	104	76-120	1	20	D1
4-Chlorotoluene	100.0	100.8	101	78-120	1	20	D1
tert-Butylbenzene	100.0	106.4	106	76-120	2	21	D1
1,2,4-Trimethylbenzene	100.0	103.0	103	77-120	1	20	D1
sec-Butylbenzene	100.0	109.0	109	80-120	2	21	D1
para-Isopropyl Toluene	100.0	101.9	102	76-120	2	20	D1
1,3-Dichlorobenzene	100.0	99.99	100	75-120	2	20	D1
1,4-Dichlorobenzene	100.0	101.0	101	77-120	1	23	D1
n-Butylbenzene	100.0	108.7	109	76-120	1	21	D1
1,2-Dichlorobenzene	100.0	102.3	102	76-120	1	20	D1
1,2-Dibromo-3-Chloropropane	100.0	103.6	104	65-120	3	22	D1
1,2,4-Trichlorobenzene	100.0	99.67	100	73-121	1	20	D1
Hexachlorobutadiene	100.0	103.4	103	73-123	0	25	D1
Naphthalene	100.0	116.9	117	62-121	1	32	D1
1,2,3-Trichlorobenzene	100.0	106.9	107	66-123	1	29	D1

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	102	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514564	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514564	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BS Lab ID: QC514565

Analyte	Spiked	Result		%REC	Limits	ADEQ Flags
Freon 12	20.00	21.10		105	56-140	
Chloromethane	20.00	20.00		100	46-142	
Vinyl Chloride	20.00	19.55		98	49-136	
Bromomethane	20.00	17.06		85	42-154	
Chloroethane	20.00	25.29	b	126	51-133	V3
Trichlorofluoromethane	20.00	20.34		102	63-135	
Iodomethane	20.00	13.64	b	68 *	70-130	L2 V9
Acetone	20.00	17.77		89	48-130	
1,1-Dichloroethene	20.00	20.76		104	68-133	
Methylene Chloride	20.00	19.85		99	71-120	
Carbon Disulfide	20.00	16.97		85	56-120	
MTBE	20.00	18.75		94	58-120	
trans-1,2-Dichloroethene	20.00	21.00		105	80-120	
Vinyl Acetate	20.00	15.82	b	79	63-124	V9
1,1-Dichloroethane	20.00	20.79		104	77-120	
2-Butanone	20.00	18.74		94	57-120	
cis-1,2-Dichloroethene	20.00	20.17		101	75-120	
2,2-Dichloropropane	20.00	20.01		100	72-128	
Chloroform	20.00	20.15		101	78-120	
Bromochloromethane	20.00	20.30		101	78-120	
1,1,1-Trichloroethane	20.00	21.61		108	78-120	
1,1-Dichloropropene	20.00	22.21		111	75-120	
Carbon Tetrachloride	20.00	21.89		109	80-120	
1,2-Dichloroethane	20.00	20.79		104	74-120	
Benzene	20.00	20.65		103	77-120	
Trichloroethene	20.00	21.46		107	78-122	
1,2-Dichloropropane	20.00	20.16		101	76-120	
Bromodichloromethane	20.00	20.57		103	78-120	
Dibromomethane	20.00	20.58		103	77-120	
4-Methyl-2-Pentanone	20.00	19.81		99	65-120	
cis-1,3-Dichloropropene	20.00	21.39		107	76-120	
Toluene	20.00	20.77		104	73-120	
trans-1,3-Dichloropropene	20.00	19.99		100	72-120	
1,1,2-Trichloroethane	20.00	21.78		109	76-120	
2-Hexanone	20.00	19.98		100	57-121	
1,3-Dichloropropane	20.00	22.25		111	75-120	
Tetrachloroethene	20.00	22.46		112	77-120	
Dibromochloromethane	20.00	20.86		104	76-120	
1,2-Dibromoethane	20.00	21.62		108	77-120	
Chlorobenzene	20.00	21.13		106	78-120	
1,1,1,2-Tetrachloroethane	20.00	21.16		106	77-120	
Ethylbenzene	20.00	21.65		108	78-120	
m,p-Xylenes	40.00	43.14		108	77-120	
o-Xylene	20.00	21.22		106	77-120	
Styrene	20.00	21.33		107	77-120	
Bromoform	20.00	19.86		99	74-121	
Isopropylbenzene	20.00	20.19		101	71-120	
1,1,2,2-Tetrachloroethane	20.00	21.46		107	73-120	
1,2,3-Trichloropropane	20.00	22.40		112	72-120	
Propylbenzene	20.00	22.83		114	76-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	20.00	21.69	108	75-120	
1,3,5-Trimethylbenzene	20.00	22.51	113	77-120	
2-Chlorotoluene	20.00	22.30	111	76-120	
4-Chlorotoluene	20.00	21.63	108	78-120	
tert-Butylbenzene	20.00	23.09	115	76-120	
1,2,4-Trimethylbenzene	20.00	22.21	111	77-120	
sec-Butylbenzene	20.00	23.71	119	80-120	
para-Isopropyl Toluene	20.00	22.10	110	76-120	
1,3-Dichlorobenzene	20.00	21.50	108	75-120	
1,4-Dichlorobenzene	20.00	21.50	107	77-120	
n-Butylbenzene	20.00	23.65	118	76-120	
1,2-Dichlorobenzene	20.00	21.69	108	76-120	
1,2-Dibromo-3-Chloropropane	20.00	20.04	100	65-120	
1,2,4-Trichlorobenzene	20.00	20.86	104	73-121	
Hexachlorobutadiene	20.00	22.95	115	73-123	
Naphthalene	20.00	22.66	113	62-121	
1,2,3-Trichlorobenzene	20.00	21.88	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	103	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: BSD Lab ID: QC514566

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Freon 12	20.00	20.95	105	56-140	1	24	
Chloromethane	20.00	19.73	99	46-142	1	24	
Vinyl Chloride	20.00	20.17	101	49-136	3	24	
Bromomethane	20.00	17.62	88	42-154	3	24	
Chloroethane	20.00	20.73 b	104	51-133	20	25	V3
Trichlorofluoromethane	20.00	20.44	102	63-135	0	20	
Iodomethane	20.00	14.18 b	71	70-130	4	20	V9
Acetone	20.00	18.16	91	48-130	2	41	
1,1-Dichloroethene	20.00	20.94	105	68-133	1	20	
Methylene Chloride	20.00	19.70	98	71-120	1	20	
Carbon Disulfide	20.00	16.98	85	56-120	0	20	
MTBE	20.00	18.09	90	58-120	4	21	
trans-1,2-Dichloroethene	20.00	21.16	106	80-120	1	24	
Vinyl Acetate	20.00	13.99 b	70	63-124	12	24	V9
1,1-Dichloroethane	20.00	20.84	104	77-120	0	20	
2-Butanone	20.00	18.15	91	57-120	3	32	
cis-1,2-Dichloroethene	20.00	20.12	101	75-120	0	20	
2,2-Dichloropropane	20.00	19.89	99	72-128	1	24	
Chloroform	20.00	20.06	100	78-120	0	20	
Bromochloromethane	20.00	20.13	101	78-120	1	20	
1,1,1-Trichloroethane	20.00	21.76	109	78-120	1	20	
1,1-Dichloropropene	20.00	22.25	111	75-120	0	21	
Carbon Tetrachloride	20.00	22.11	111	80-120	1	21	
1,2-Dichloroethane	20.00	20.66	103	74-120	1	20	
Benzene	20.00	20.62	103	77-120	0	20	
Trichloroethene	20.00	21.64	108	78-122	1	20	
1,2-Dichloropropane	20.00	20.16	101	76-120	0	20	
Bromodichloromethane	20.00	20.36	102	78-120	1	20	
Dibromomethane	20.00	20.12	101	77-120	2	20	
4-Methyl-2-Pentanone	20.00	18.49	92	65-120	7	22	
cis-1,3-Dichloropropene	20.00	21.10	106	76-120	1	20	
Toluene	20.00	20.77	104	73-120	0	20	
trans-1,3-Dichloropropene	20.00	19.42	97	72-120	3	20	
1,1,2-Trichloroethane	20.00	21.16	106	76-120	3	20	
2-Hexanone	20.00	18.70	94	57-121	7	25	
1,3-Dichloropropane	20.00	21.70	108	75-120	3	20	
Tetrachloroethene	20.00	22.52	113	77-120	0	20	
Dibromochloromethane	20.00	20.37	102	76-120	2	20	
1,2-Dibromoethane	20.00	20.77	104	77-120	4	20	
Chlorobenzene	20.00	20.86	104	78-120	1	20	
1,1,1,2-Tetrachloroethane	20.00	20.94	105	77-120	1	20	
Ethylbenzene	20.00	21.49	107	78-120	1	26	
m,p-Xylenes	40.00	43.05	108	77-120	0	20	
o-Xylene	20.00	21.00	105	77-120	1	20	
Styrene	20.00	20.98	105	77-120	2	20	
Bromoform	20.00	18.92	95	74-121	5	21	
Isopropylbenzene	20.00	19.69	98	71-120	2	20	
1,1,2,2-Tetrachloroethane	20.00	19.74	99	73-120	8	20	
1,2,3-Trichloropropane	20.00	20.89	104	72-120	7	20	
Propylbenzene	20.00	22.30	112	76-120	2	20	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	155528
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Bromobenzene	20.00	21.07	105	75-120	3	20	
1,3,5-Trimethylbenzene	20.00	22.07	110	77-120	2	20	
2-Chlorotoluene	20.00	21.78	109	76-120	2	20	
4-Chlorotoluene	20.00	21.10	106	78-120	2	20	
tert-Butylbenzene	20.00	22.47	112	76-120	3	21	
1,2,4-Trimethylbenzene	20.00	21.63	108	77-120	3	20	
sec-Butylbenzene	20.00	23.12	116	80-120	3	21	
para-Isopropyl Toluene	20.00	21.49	107	76-120	3	20	
1,3-Dichlorobenzene	20.00	20.98	105	75-120	2	20	
1,4-Dichlorobenzene	20.00	20.97	105	77-120	2	23	
n-Butylbenzene	20.00	22.83	114	76-120	4	21	
1,2-Dichlorobenzene	20.00	20.99	105	76-120	3	20	
1,2-Dibromo-3-Chloropropane	20.00	18.10	91	65-120	10	22	
1,2,4-Trichlorobenzene	20.00	19.91	100	73-121	5	20	
Hexachlorobutadiene	20.00	22.03	110	73-123	4	25	
Naphthalene	20.00	20.74	104	62-121	9	32	
1,2,3-Trichlorobenzene	20.00	20.90	104	66-123	5	29	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	101	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	102	78-120	

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514686	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V1
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC514686	Batch#:	155528
Matrix:	Water	Analyzed:	10/01/09
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469393599006 File : giu06 Time : 30-SEP-2009 10:27

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	12433	16.29	
75	30% - 60% of mass 95	33789	44.28	
95		76312	100.00	
96	5% - 9% of mass 95	4831	6.33	
173	< 2% of mass 174	130	0.20	
174	> 50% and < 100% of mass 95	65213	85.46	
175	5% - 9% of mass 174	4663	7.15	
176	> 95% and < 101% of mass 174	63722	97.71	
177	5% - 9% of mass 176	4189	6.57	

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469393599023 File : giu23 Time : 30-SEP-2009 19:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13571	16.48	
75	30% - 60% of mass 95	37362	45.38	
95		82328	100.00	
96	5% - 9% of mass 95	5444	6.61	
173	< 2% of mass 174	243	0.35	
174	> 50% and < 100% of mass 95	70056	85.09	
175	5% - 9% of mass 174	4780	6.82	
176	> 95% and < 101% of mass 174	67722	96.67	
177	5% - 9% of mass 176	4535	6.70	

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469395137001 File : gj101 Time : 01-OCT-2009 09:37

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13457	17.66	
75	30% - 60% of mass 95	34944	45.86	
95		76189	100.00	
96	5% - 9% of mass 95	5687	7.46	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	63104	82.83	
175	5% - 9% of mass 174	4511	7.15	
176	> 95% and < 101% of mass 174	62136	98.47	
177	5% - 9% of mass 176	4264	6.86	

TEW: 10/01/09 DNT: 10/02/09 LW: 10/02/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : BFB IDF : 1.0
Seqnum : 469395137011 File : gj111 Time : 01-OCT-2009 15:05

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	14999	17.07	
75	30% - 60% of mass 95	40045	45.58	
95		87861	100.00	
96	5% - 9% of mass 95	5964	6.79	
173	< 2% of mass 174	413	0.57	
174	> 50% and < 100% of mass 95	72752	82.80	
175	5% - 9% of mass 174	5124	7.04	
176	> 95% and < 101% of mass 174	69909	96.09	
177	5% - 9% of mass 176	5159	7.38	

TEW: 10/01/09 DNT: 10/02/09 LW: 10/02/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499361940008 File : ji808 Time : 09-SEP-2009 00:19

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	42221	27.77	
75	30% - 60% of mass 95	74037	48.70	
95		152042	100.00	
96	5% - 9% of mass 95	10062	6.62	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	113397	74.58	
175	5% - 9% of mass 174	8359	7.37	
176	> 95% and < 101% of mass 174	108642	95.81	
177	5% - 9% of mass 176	7287	6.71	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499363592006 File : ji906 Time : 09-SEP-2009 14:47

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37064	27.53	
75	30% - 60% of mass 95	66016	49.03	
95		134640	100.00	
96	5% - 9% of mass 95	8828	6.56	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	99874	74.18	
175	5% - 9% of mass 174	7262	7.27	
176	> 95% and < 101% of mass 174	94946	95.07	
177	5% - 9% of mass 176	6387	6.73	

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 499393725003 File : jiu03 Time : 30-SEP-2009 11:08

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	88029	28.78	
75	30% - 60% of mass 95	154965	50.66	
95		305898	100.00	
96	5% - 9% of mass 95	19816	6.48	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	230698	75.42	
175	5% - 9% of mass 174	17044	7.39	
176	> 95% and < 101% of mass 174	220181	95.44	
177	5% - 9% of mass 176	14632	6.65	

Analyst: MJD Date: 09/30/09 Reviewer: LW Date: 09/30/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839371979004 File : kif04 Time : 15-SEP-2009 09:26

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	9603	19.12	
75	30% - 60% of mass 95	24779	49.33	
95		50229	100.00	
96	5% - 9% of mass 95	3409	6.79	
173	< 2% of mass 174	66	0.18	
174	> 50% and < 100% of mass 95	36208	72.09	
175	5% - 9% of mass 174	2632	7.27	
176	> 95% and < 101% of mass 174	35832	98.96	
177	5% - 9% of mass 176	2540	7.09	

Analyst: BO Date: 09/15/09 Reviewer: LW Date: 09/16/09

CURTIS & TOMPKINS BFB TUNE FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : BFB IDF : 1.0
Seqnum : 839393591010 File : kiu10 Time : 30-SEP-2009 11:44

Standards: S12404

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	10882	16.10	
75	30% - 60% of mass 95	32085	47.47	
95		67583	100.00	
96	5% - 9% of mass 95	4777	7.07	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	56512	83.62	
175	5% - 9% of mass 174	4229	7.48	
176	> 95% and < 101% of mass 174	54238	95.98	
177	5% - 9% of mass 176	3468	6.39	

BO: 09/30/09 DNT: 10/01/09 LW: 10/01/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 MSVOA Water: EPA 8260B

Inst : MSVOA07 Name : 826GOX7
Calnum : 469393599002 Date : 30-SEP-2009 11:10 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	giu08	469393599008	.25/.5PPB	30-SEP-2009 11:10	S13034 (200000X), S13036 (200000X), S13035 (200000X), S13033 (100000X), S12921 (5000X)
L2	giu09	469393599009	0.5/1PPB	30-SEP-2009 11:40	S13034 (100000X), S13036 (100000X), S13035 (100000X), S13033 (50000X), S12921 (5000X)
L3	giu10	469393599010	2PPB	30-SEP-2009 12:11	S13034 (25000X), S13036 (25000X), S13035 (50000X), S13033 (25000X), S12921 (5000X)
L4	giu11	469393599011	5PPB	30-SEP-2009 12:41	S13034 (10000X), S13036 (10000X), S13035 (20000X), S13033 (10000X), S12921 (5000X)
L5	giu12	469393599012	10PPB	30-SEP-2009 13:12	S13034 (5000X), S13036 (5000X), S13035 (10000X), S13033 (5000X), S12921 (5000X)
L6	giu13	469393599013	20PPB	30-SEP-2009 13:43	S12998 (25000X), S13032 (25000X), S12565 (50000X), S12929 (25000X), S12921 (5000X)
L7	giu14	469393599014	50PPB	30-SEP-2009 14:13	S12998 (10000X), S13032 (10000X), S12565 (20000X), S12929 (10000X), S12921 (5000X)
L8	giu16	469393599016	100PPB	30-SEP-2009 15:15	S12998 (5000X), S13032 (5000X), S12565 (10000X), S12929 (5000X), S12921 (5000X)
L9	giu20	469393599020	75PPB	30-SEP-2009 17:48	S12998 (6667X), S13032 (6667X), S12565 (13330X), S12929 (6667X), S12921 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.3465	0.3588	0.3938	0.4177	0.3936	0.3987	0.4074	0.3881	AVRG		2.57675		0.3881	6	15	0.05	0.99	
Chloromethane		0.4519	0.4803	0.4783	0.4213	0.4246	0.4066	0.3887	0.3867	AVRG		2.32658		0.4298	9	15	0.10	0.99	
Vinyl Chloride	0.3320	0.3709	0.4171	0.4434	0.4108	0.4192	0.4049	0.3995	0.3797	AVRG		2.51574		0.3975	8	15	0.05	0.99	
Bromomethane		0.2792	0.2775	0.2629	0.2285	0.2349	0.2326	0.2368	0.2180	AVRG		4.06008		0.2463	10	15	0.05	0.99	
Chloroethane		0.3055	0.2736	0.2640	0.2343	0.2440	0.2330	0.2277	0.3160	AVRG		3.81270		0.2623	13	15	0.05	0.99	
Trichlorofluoromethane		0.4891	0.5260	0.5747	0.5771	0.5637	0.5603	0.5648	0.5412	AVRG		1.81940		0.5496	5	15	0.05	0.99	
Acetone				0.1641	0.1518	0.1219	0.1398	0.1268	0.1165	AVRG		7.30832		0.1368	14	15	0.05	0.99	
1,1-Dichloroethene		0.3209	0.3529	0.3394	0.3172	0.3288	0.2982	0.3175	0.3181	AVRG		3.08521		0.3241	5	15	0.05	0.99	
Iodomethane				0.5303	0.4675	0.4972	0.5019	0.5021	0.4906	AVRG		2.00691		0.4983	4	15	0.05	0.99	
Methylene Chloride		0.5259	0.4778	0.4531	0.4324	0.4130	0.3999	0.3951	0.3949	AVRG		2.29098		0.4365	11	15	0.05	0.99	
Carbon Disulfide		1.2264	1.3985	1.4190	1.2704	1.3482	1.2367	1.2947	1.3007	AVRG		0.76230		1.3118	5	15	0.05	0.99	
MTBE		1.3509	1.3731	1.3666	1.2135	1.2890	1.3213	1.2570	1.2197	AVRG		0.76989		1.2989	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4276	0.4377	0.4314	0.3751	0.3965	0.3698	0.3777	0.3793	AVRG		2.50380		0.3994	7	15	0.05	0.99	
Vinyl Acetate			0.8075	0.8569	0.7566	0.8237	0.7987	0.6851	0.8331	AVRG		1.25867		0.7945	7	15	0.05	0.99	
1,1-Dichloroethane		0.7137	0.7818	0.7772	0.6702	0.7020	0.6728	0.6705	0.6769	AVRG		1.41216		0.7081	7	15	0.10	0.99	
2-Butanone				0.2147	0.2081	0.1864	0.2131	0.1860	0.1745	AVRG		5.07247		0.1971	9	15	0.05	0.99	
2,2-Dichloropropane		0.5306	0.5811	0.5912	0.5235	0.5434	0.4861	0.5038	0.5593	AVRG		1.85230		0.5399	7	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4767	0.4998	0.4964	0.4290	0.4433	0.4345	0.4323	0.4348	AVRG		2.19371		0.4558	7	15	0.05	0.99	
Chloroform		0.8178	0.7499	0.7307	0.6259	0.6562	0.6318	0.6253	0.6297	AVRG		1.46326		0.6834	11	15	0.05	0.99	
Bromochloromethane		0.2076	0.2207	0.2227	0.1997	0.2121	0.2125	0.2094	0.2068	AVRG		4.72934		0.2114	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.5064	0.5835	0.5717	0.5184	0.5495	0.4796	0.5202	0.5223	AVRG		1.88165		0.5314	7	15	0.05	0.99	
1,1-Dichloropropene		0.3004	0.3666	0.3688	0.3410	0.3571	0.3059	0.3389	0.3400	AVRG		2.94257		0.3398	8	15	0.05	0.99	
Carbon Tetrachloride		0.2503	0.3007	0.3082	0.2890	0.3032	0.2514	0.2910	0.2868	AVRG		3.50798		0.2851	8	15	0.05	0.99	
1,2-Dichloroethane		0.3246	0.3492	0.3445	0.3100	0.3254	0.3251	0.3158	0.3096	AVRG		3.07204		0.3255	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.1955	1.2722	1.2435	1.1269	1.1431	1.0779	1.0728	1.0770	AVRG		0.86872		1.1511	7	15	0.05	0.99	
Trichloroethene		0.2781	0.2913	0.2864	0.2556	0.2683	0.2475	0.2637	0.2539	AVRG		3.72991		0.2681	6	15	0.05	0.99	
1,2-Dichloropropane		0.2920	0.3231	0.3278	0.2864	0.3043	0.2930	0.2920	0.2896	AVRG		3.32216		0.3010	5	15	0.05	0.99	
Bromodichloromethane		0.3403	0.3421	0.3469	0.3066	0.3242	0.3232	0.3239	0.3178	AVRG		3.04758		0.3281	4	15	0.05	0.99	
Dibromomethane		0.1627	0.1638	0.1651	0.1471	0.1573	0.1612	0.1555	0.1504	AVRG		6.33371		0.1579	4	15	0.05	0.99	
4-Methyl-2-Pentanone				0.2664	0.2394	0.2607	0.2919	0.2632	0.2395	AVRG		3.84360		0.2602	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4626	0.4691	0.4698	0.4237	0.4509	0.4463	0.4384	0.4405	AVRG		2.22138		0.4502	4	15	0.05	0.99	
Toluene		0.7868	0.8483	0.8390	0.9589	0.7727	0.7097	0.7310	0.7324	AVRG		1.25417		0.7973	10	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4286	0.4618	0.4615	0.4212	0.4424	0.4467	0.4367	0.4336	AVRG		2.26463		0.4416	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1393	0.1450	0.1423	0.1277	0.1372	0.1395	0.1350	0.1305	AVRG		7.29501		0.1371	4	15	0.05	0.99	
2-Hexanone				0.2120	0.1886	0.1929	0.2183	0.1961	0.1778	AVRG		5.06081		0.1976	8	15	0.05	0.99	
1,3-Dichloropropane		0.4684	0.4786	0.4791	0.4343	0.4611	0.4635	0.4479	0.4360	AVRG		2.18044		0.4586	4	15	0.05	0.99	
Tetrachloroethene		0.2668	0.3234	0.3253	0.2976	0.3070	0.2552	0.2987	0.2934	AVRG		3.37916		0.2959	8	15	0.05	0.99	
Dibromochloromethane		0.2489	0.2612	0.2618	0.2403	0.2603	0.2701	0.2697	0.2594	AVRG		3.86159		0.2590	4	15	0.05	0.99	
1,2-Dibromoethane		0.2573	0.2765	0.2670	0.2391	0.2604	0.2700	0.2613	0.2482	AVRG		3.84639		0.2600	5	15	0.05	0.99	
Chlorobenzene		0.8789	0.9513	0.9329	0.8095	0.8589	0.8162	0.8191	0.8172	AVRG		1.16210		0.8605	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2692	0.2946	0.2937	0.2643	0.2797	0.2748	0.2786	0.2740	AVRG		3.58918		0.2786	4	15	0.05	0.99	
Ethylbenzene		1.4634	1.5794	1.5510	1.4652	1.4397	1.2706	1.3449	1.3573	AVRG		0.69738		1.4339	7	15	0.05	0.99	
m,p-Xylenes	0.5403	0.5592	0.6410	0.6288	0.6202	0.5848	0.5231	0.5501	0.5553	AVRG		1.72989		0.5781	7	15	0.05	0.99	
o-Xylene		0.5654	0.6144	0.6186	0.5871	0.5741	0.5333	0.5484	0.5496	AVRG		1.74253		0.5739	5	15	0.05	0.99	
Styrene		0.9546	1.0386	1.0499	0.9258	0.9871	0.9491	0.9571	0.9536	AVRG		1.02357		0.9770	5	15	0.05	0.99	
Bromoform		0.1577	0.1831	0.1777	0.1602	0.1795	0.1969	0.1960	0.1802	AVRG		5.58925		0.1789	8	15	0.10	0.99	
Isopropylbenzene		2.3289	2.6211	2.6264	2.3814	2.4588	2.0388	2.3224	2.3324	AVRG		0.41862		2.3888	8	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6435	0.6608	0.6069	0.5361	0.5868	0.6071	0.5599	0.5492	AVRG		1.68409		0.5938	7	15	0.30	0.99	
1,2,3-Trichloropropane		0.6179	0.6445	0.5911	0.5130	0.5682	0.5821	0.5420	0.5163	AVRG		1.74857		0.5719	8	15	0.05	0.99	
Propylbenzene		2.8823	3.1150	3.1408	2.8675	2.9304	2.4150	2.7087	2.7637	AVRG		0.35052		2.8529	8	15	0.05	0.99	
Bromobenzene		0.6870	0.7179	0.7130	0.6276	0.6617	0.6415	0.6530	0.6446	AVRG		1.49638		0.6683	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9861	2.2996	2.2618	2.0657	2.1027	1.8113	1.9858	2.0028	AVRG		0.48438		2.0645	8	15	0.05	0.99	
2-Chlorotoluene		2.1601	2.1987	2.1366	1.8784	1.9716	1.7702	1.8494	1.8745	AVRG		0.50507		1.9799	8	15	0.05	0.99	
4-Chlorotoluene		2.0398	2.0094	2.0161	1.7717	1.8557	1.7016	1.7621	1.7797	AVRG		0.53562		1.8670	7	15	0.05	0.99	
tert-Butylbenzene		1.7000	1.9298	1.9036	1.7349	1.8034	1.4646	1.7049	1.7009	AVRG		0.57380		1.7428	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1478	2.3679	2.3180	2.2234	2.1500	1.9102	2.0386	2.0526	AVRG		0.46489		2.1510	7	15	0.05	0.99	
sec-Butylbenzene		2.3119	2.6939	2.7139	2.5155	2.5954	2.0395	2.4392	2.4542	AVRG		0.40479		2.4704	9	15	0.05	0.99	
para-Isopropyl Toluene		2.1581	2.4001	2.3931	2.1997	2.2676	1.8484	2.1597	2.1683	AVRG		0.45468		2.1994	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.2753	1.3491	1.3431	1.1776	1.2368	1.1596	1.2027	1.1973	AVRG		0.80471		1.2427	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3588	1.4005	1.3741	1.2182	1.2715	1.2081	1.2420	1.2313	AVRG		0.77636		1.2881	6	15	0.05	0.99	
n-Butylbenzene		1.7919	2.0581	2.0570	1.9181	1.9888	1.5955	1.8810	1.9165	AVRG		0.52607		1.9009	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.2209	1.2680	1.2726	1.1189	1.1777	1.1382	1.1592	1.1401	AVRG		0.84250		1.1869	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1462	0.1171	0.0954	0.1059	0.1158	0.1076	0.0967	AVRG		8.92114		0.1121	15	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8783	0.9294	0.9188	0.8370	0.8824	0.8328	0.8974	0.8692	AVRG		1.13551		0.8807	4	15	0.05	0.99	
Hexachlorobutadiene		0.2978	0.3524	0.3565	0.3350	0.3491	0.2752	0.3434	0.3508	AVRG		3.00734		0.3325	9	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.4957	1.7246	1.6183	1.4943	1.6937	1.8932	1.8767	1.7101	AVRG		0.59230		1.6883	9	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7635	0.7800	0.8041	0.7152	0.7638	0.7487	0.7867	0.7409	AVRG		1.31085		0.7629	4	15	0.05	0.99	
Dibromofluoromethane		0.4070	0.4054	0.4085	0.4084	0.4068	0.4073	0.4078	0.4123	AVRG		2.45133		0.4079	0	15	0.05	0.99	
1,2-Dichloroethane-d4		0.3024	0.3126	0.3118	0.3060	0.3104	0.3116	0.3049	0.3011	AVRG		3.25099		0.3076	1	15	0.05	0.99	
Toluene-d8		1.2913	1.2939	1.2941	1.2950	1.2955	1.2890	1.2924	1.2960	AVRG		0.77316		1.2934	0	15	0.05	0.99	
Bromofluorobenzene		0.8706	0.8806	0.8680	0.8741	0.8760	0.8648	0.8678	0.8717	AVRG		1.14719		0.8717	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-11	2.000	-8	5.000	1	10.00	8	20.00	1	50.00	3	100.0	5	75.00	0
Chloromethane			1.000	5	2.000	12	5.000	11	10.00	-2	20.00	-1	50.00	-5	100.0	-10	75.00	-10
Vinyl Chloride	0.500	-16	1.000	-7	2.000	5	5.000	12	10.00	3	20.00	5	50.00	2	100.0	1	75.00	-4
Bromomethane			1.000	13	2.000	13	5.000	7	10.00	-7	20.00	-5	50.00	-6	100.0	-4	75.00	-12
Chloroethane			1.000	16	2.000	4	5.000	1	10.00	-11	20.00	-7	50.00	-11	100.0	-13	75.00	20
Trichlorofluoromethane			1.000	-11	2.000	-4	5.000	5	10.00	5	20.00	3	50.00	2	100.0	3	75.00	-2
Acetone							5.000	20	10.00	11	20.00	-11	50.00	2	100.0	-7	75.00	-15
1,1-Dichloroethene			0.500	-1	2.000	9	5.000	5	10.00	-2	20.00	1	50.00	-8	100.0	-2	75.00	-2
Iodomethane							5.000	6	10.00	-6	20.00	0	50.00	1	100.0	1	75.00	-2
Methylene Chloride			0.500	20	2.000	9	5.000	4	10.00	-1	20.00	-5	50.00	-8	100.0	-9	75.00	-10
Carbon Disulfide			0.500	-7	2.000	7	5.000	8	10.00	-3	20.00	3	50.00	-6	100.0	-1	75.00	-1
MTBE			0.500	4	2.000	6	5.000	5	10.00	-7	20.00	-1	50.00	2	100.0	-3	75.00	-6
trans-1,2-Dichloroethene			0.500	7	2.000	10	5.000	8	10.00	-6	20.00	-1	50.00	-7	100.0	-5	75.00	-5
Vinyl Acetate					2.000	2	5.000	8	10.00	-5	20.00	4	50.00	1	100.0	-14	75.00	5
1,1-Dichloroethane			0.500	1	2.000	10	5.000	10	10.00	-5	20.00	-1	50.00	-5	100.0	-5	75.00	-4
2-Butanone							5.000	9	10.00	6	20.00	-5	50.00	8	100.0	-6	75.00	-11
2,2-Dichloropropane			0.500	-2	2.000	8	5.000	10	10.00	-3	20.00	1	50.00	-10	100.0	-7	75.00	4
cis-1,2-Dichloroethene			0.500	5	2.000	10	5.000	9	10.00	-6	20.00	-3	50.00	-5	100.0	-5	75.00	-5
Chloroform			0.500	20	2.000	10	5.000	7	10.00	-8	20.00	-4	50.00	-8	100.0	-9	75.00	-8
Bromochloromethane			0.500	-2	2.000	4	5.000	5	10.00	-6	20.00	0	50.00	0	100.0	-1	75.00	-2
1,1,1-Trichloroethane			0.500	-5	2.000	10	5.000	8	10.00	-2	20.00	3	50.00	-10	100.0	-2	75.00	-2
1,1-Dichloropropene			0.500	-12	2.000	8	5.000	9	10.00	0	20.00	5	50.00	-10	100.0	0	75.00	0
Carbon Tetrachloride			0.500	-12	2.000	5	5.000	8	10.00	1	20.00	6	50.00	-12	100.0	2	75.00	1
1,2-Dichloroethane			0.500	0	2.000	7	5.000	6	10.00	-5	20.00	0	50.00	0	100.0	-3	75.00	-5
Benzene			0.500	4	2.000	11	5.000	8	10.00	-2	20.00	-1	50.00	-6	100.0	-7	75.00	-6
Trichloroethene			0.500	4	2.000	9	5.000	7	10.00	-5	20.00	0	50.00	-8	100.0	-2	75.00	-5
1,2-Dichloropropane			0.500	-3	2.000	7	5.000	9	10.00	-5	20.00	1	50.00	-3	100.0	-3	75.00	-4
Bromodichloromethane			0.500	4	2.000	4	5.000	6	10.00	-7	20.00	-1	50.00	-1	100.0	-1	75.00	-3
Dibromomethane			0.500	3	2.000	4	5.000	5	10.00	-7	20.00	0	50.00	2	100.0	-1	75.00	-5
4-Methyl-2-Pentanone							5.000	2	10.00	-8	20.00	0	50.00	12	100.0	1	75.00	-8
cis-1,3-Dichloropropene			0.500	3	2.000	4	5.000	4	10.00	-6	20.00	0	50.00	-1	100.0	-3	75.00	-2
Toluene			0.500	-1	2.000	6	5.000	5	10.00	20	20.00	-3	50.00	-11	100.0	-8	75.00	-8
trans-1,3-Dichloropropene			0.500	-3	2.000	5	5.000	5	10.00	-5	20.00	0	50.00	1	100.0	-1	75.00	-2
1,1,2-Trichloroethane			0.500	2	2.000	6	5.000	4	10.00	-7	20.00	0	50.00	2	100.0	-2	75.00	-5
2-Hexanone							5.000	7	10.00	-5	20.00	-2	50.00	10	100.0	-1	75.00	-10
1,3-Dichloropropane			0.500	2	2.000	4	5.000	4	10.00	-5	20.00	1	50.00	1	100.0	-2	75.00	-5
Tetrachloroethene			0.500	-10	2.000	9	5.000	10	10.00	1	20.00	4	50.00	-14	100.0	1	75.00	-1
Dibromochloromethane			0.500	-4	2.000	1	5.000	1	10.00	-7	20.00	1	50.00	4	100.0	4	75.00	0
1,2-Dibromoethane			0.500	-1	2.000	6	5.000	3	10.00	-8	20.00	0	50.00	4	100.0	0	75.00	-5
Chlorobenzene			0.500	2	2.000	11	5.000	8	10.00	-6	20.00	0	50.00	-5	100.0	-5	75.00	-5
1,1,1,2-Tetrachloroethane			0.500	-3	2.000	6	5.000	5	10.00	-5	20.00	0	50.00	-1	100.0	0	75.00	-2
Ethylbenzene			0.500	2	2.000	10	5.000	8	10.00	2	20.00	0	50.00	-11	100.0	-6	75.00	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-7	1.000	-3	4.000	11	10.00	9	20.00	7	40.00	1	100.0	-10	200.0	-5	150.0	-4
o-Xylene			0.500	-1	2.000	7	5.000	8	10.00	2	20.00	0	50.00	-7	100.0	-4	75.00	-4
Styrene			0.500	-2	2.000	6	5.000	7	10.00	-5	20.00	1	50.00	-3	100.0	-2	75.00	-2
Bromoform			0.500	-12	2.000	2	5.000	-1	10.00	-10	20.00	0	50.00	10	100.0	10	75.00	1
Isopropylbenzene			0.500	-3	2.000	10	5.000	10	10.00	0	20.00	3	50.00	-15	100.0	-3	75.00	-2
1,1,2,2-Tetrachloroethane			0.500	8	2.000	11	5.000	2	10.00	-10	20.00	-1	50.00	2	100.0	-6	75.00	-8
1,2,3-Trichloropropane			0.500	8	2.000	13	5.000	3	10.00	-10	20.00	-1	50.00	2	100.0	-5	75.00	-10
Propylbenzene			0.500	1	2.000	9	5.000	10	10.00	1	20.00	3	50.00	-15	100.0	-5	75.00	-3
Bromobenzene			0.500	3	2.000	7	5.000	7	10.00	-6	20.00	-1	50.00	-4	100.0	-2	75.00	-4
1,3,5-Trimethylbenzene			0.500	-4	2.000	11	5.000	10	10.00	0	20.00	2	50.00	-12	100.0	-4	75.00	-3
2-Chlorotoluene			0.500	9	2.000	11	5.000	8	10.00	-5	20.00	0	50.00	-11	100.0	-7	75.00	-5
4-Chlorotoluene			0.500	9	2.000	8	5.000	8	10.00	-5	20.00	-1	50.00	-9	100.0	-6	75.00	-5
tert-Butylbenzene			0.500	-2	2.000	11	5.000	9	10.00	0	20.00	3	50.00	-16	100.0	-2	75.00	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	10	5.000	8	10.00	3	20.00	0	50.00	-11	100.0	-5	75.00	-5
sec-Butylbenzene			0.500	-6	2.000	9	5.000	10	10.00	2	20.00	5	50.00	-17	100.0	-1	75.00	-1
para-Isopropyl Toluene			0.500	-2	2.000	9	5.000	9	10.00	0	20.00	3	50.00	-16	100.0	-2	75.00	-1
1,3-Dichlorobenzene			0.500	3	2.000	9	5.000	8	10.00	-5	20.00	0	50.00	-7	100.0	-3	75.00	-4
1,4-Dichlorobenzene			0.500	5	2.000	9	5.000	7	10.00	-5	20.00	-1	50.00	-6	100.0	-4	75.00	-4
n-Butylbenzene			0.500	-6	2.000	8	5.000	8	10.00	1	20.00	5	50.00	-16	100.0	-1	75.00	1
1,2-Dichlorobenzene			0.500	3	2.000	7	5.000	7	10.00	-6	20.00	-1	50.00	-4	100.0	-2	75.00	-4
1,2-Dibromo-3-Chloropropane					2.000	**30**	5.000	4	10.00	-15	20.00	-6	50.00	3	100.0	-4	75.00	-14
1,2,4-Trichlorobenzene			0.500	0	2.000	6	5.000	4	10.00	-5	20.00	0	50.00	-5	100.0	2	75.00	-1
Hexachlorobutadiene			0.500	-10	2.000	6	5.000	7	10.00	1	20.00	5	50.00	-17	100.0	3	75.00	5
Naphthalene			0.500	-11	2.000	2	5.000	-4	10.00	-11	20.00	0	50.00	12	100.0	11	75.00	1
1,2,3-Trichlorobenzene			0.500	0	2.000	2	5.000	5	10.00	-6	20.00	0	50.00	-2	100.0	3	75.00	-3
Dibromofluoromethane			50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	1
1,2-Dichloroethane-d4			50.00	-2	50.00	2	50.00	1	50.00	-1	50.00	1	50.00	1	50.00	-1	50.00	-2
Toluene-d8			50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0	50.00	0
Bromofluorobenzene			50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0

Analyst: TEW Date: 09/30/09 Reviewer: LW Date: 09/30/09

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Name : 826GOX7
Calnum : 469393599002 Cal Date : 30-SEP-2009 Type : WATER

ICV 469393599025 (giu25 30-SEP-2009) stds: S12996 (10000X), S13055 (10000X), S12693 (10000X), S12925 (10000X), S12921 (5000X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.51	ug/L	10	25	
Chloromethane	25.00	24.63	ug/L	-1	25	
Vinyl Chloride	25.00	24.66	ug/L	-1	25	
Bromomethane	25.00	25.23	ug/L	1	25	
Chloroethane	25.00	24.55	ug/L	-2	25	
Trichlorofluoromethane	25.00	26.09	ug/L	4	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	25.34	ug/L	1	25	
Iodomethane	25.00	27.16	ug/L	9	25	
Methylene Chloride	25.00	24.75	ug/L	-1	25	
Carbon Disulfide	25.00	20.99	ug/L	-16	25	
MTBE	25.00	25.35	ug/L	1	25	
trans-1,2-Dichloroethene	25.00	26.21	ug/L	5	25	
Vinyl Acetate	25.00	26.14	ug/L	5	25	
1,1-Dichloroethane	25.00	25.76	ug/L	3	25	
2-Butanone	25.00	28.00	ug/L	12	25	
2,2-Dichloropropane	25.00	26.68	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	25.48	ug/L	2	25	
Chloroform	25.00	25.11	ug/L	0	25	
Bromochloromethane	25.00	26.53	ug/L	6	25	
1,1,1-Trichloroethane	25.00	26.19	ug/L	5	25	
1,1-Dichloropropene	25.00	27.10	ug/L	8	25	
Carbon Tetrachloride	25.00	26.72	ug/L	7	25	
1,2-Dichloroethane	25.00	26.79	ug/L	7	25	
Benzene	25.00	25.76	ug/L	3	25	
Trichloroethene	25.00	25.89	ug/L	4	25	
1,2-Dichloropropane	25.00	25.72	ug/L	3	25	
Bromodichloromethane	25.00	26.63	ug/L	7	25	
Dibromomethane	25.00	27.06	ug/L	8	25	
4-Methyl-2-Pentanone	25.00	27.46	ug/L	10	25	
cis-1,3-Dichloropropene	25.00	27.96	ug/L	12	25	
Toluene	25.00	25.10	ug/L	0	25	
trans-1,3-Dichloropropene	25.00	25.70	ug/L	3	25	
1,1,2-Trichloroethane	25.00	27.83	ug/L	11	25	
2-Hexanone	25.00	27.59	ug/L	10	25	
1,3-Dichloropropane	25.00	27.90	ug/L	12	25	
Tetrachloroethene	25.00	26.96	ug/L	8	25	
Dibromochloromethane	25.00	27.71	ug/L	11	25	
1,2-Dibromoethane	25.00	27.89	ug/L	12	25	
Chlorobenzene	25.00	26.08	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	26.58	ug/L	6	25	
Ethylbenzene	25.00	26.32	ug/L	5	25	
m,p-Xylenes	50.00	52.90	ug/L	6	25	
o-Xylene	25.00	26.28	ug/L	5	25	
Styrene	25.00	26.83	ug/L	7	25	
Bromoform	25.00	28.39	ug/L	14	25	
Isopropylbenzene	25.00	23.76	ug/L	-5	25	
1,1,2,2-Tetrachloroethane	25.00	28.40	ug/L	14	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	28.18	ug/L	13	25	
Propylbenzene	25.00	26.88	ug/L	8	25	
Bromobenzene	25.00	26.46	ug/L	6	25	
1,3,5-Trimethylbenzene	25.00	26.84	ug/L	7	25	
2-Chlorotoluene	25.00	26.40	ug/L	6	25	
4-Chlorotoluene	25.00	25.98	ug/L	4	25	
tert-Butylbenzene	25.00	27.34	ug/L	9	25	
1,2,4-Trimethylbenzene	25.00	26.50	ug/L	6	25	
sec-Butylbenzene	25.00	28.22	ug/L	13	25	
para-Isopropyl Toluene	25.00	26.66	ug/L	7	25	
1,3-Dichlorobenzene	25.00	26.24	ug/L	5	25	
1,4-Dichlorobenzene	25.00	26.29	ug/L	5	25	
n-Butylbenzene	25.00	28.82	ug/L	15	25	
1,2-Dichlorobenzene	25.00	26.60	ug/L	6	25	
1,2-Dibromo-3-Chloropropane	25.00	27.52	ug/L	10	25	
1,2,4-Trichlorobenzene	25.00	26.65	ug/L	7	25	
Hexachlorobutadiene	25.00	29.26	ug/L	17	25	
Naphthalene	25.00	30.45	ug/L	22	25	
1,2,3-Trichlorobenzene	25.00	28.11	ug/L	12	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 MSVOA Water: EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Date : 09-SEP-2009 02:42 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ji812	499361940012	.25/0.5PPB	09-SEP-2009 02:42	S12733 (2000000X), S12773 (2000000X), S12217 (2000000X), S12685 (1000000X), S12692 (2500X)
L2	ji813	499361940013	0.5/1PPB	09-SEP-2009 03:16	S12733 (1000000X), S12773 (1000000X), S12217 (1000000X), S12685 (500000X), S12692 (2500X)
L3	ji814	499361940014	2PPB	09-SEP-2009 03:51	S12733 (250000X), S12773 (250000X), S12217 (500000X), S12685 (250000X), S12692 (2500X)
L4	ji815	499361940015	5PPB	09-SEP-2009 04:25	S12733 (100000X), S12773 (100000X), S12217 (200000X), S12685 (100000X), S12692 (2500X)
L5	ji816	499361940016	10PPB	09-SEP-2009 04:59	S12733 (50000X), S12773 (50000X), S12217 (100000X), S12685 (50000X), S12692 (2500X)
L6	ji817	499361940017	20PPB	09-SEP-2009 05:34	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12685 (25000X), S12692 (2500X)
L7	ji818	499361940018	50PPB	09-SEP-2009 06:08	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12685 (10000X), S12692 (2500X)
L8	ji819	499361940019	75PPB	09-SEP-2009 06:42	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12685 (6667X), S12692 (2500X)
L9	ji820	499361940020	100PPB	09-SEP-2009 07:17	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12685 (5000X), S12692 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.6454	0.6785	0.6243	0.6055	0.7615	0.7349	0.6564	0.6711	AVRG		1.48764		0.6722	8	15	0.05	0.99	
Chloromethane		1.5093	1.4219	1.2231	1.2011	1.4382	1.3492	1.2959	1.3263	AVRG		0.74314		1.3456	8	15	0.10	0.99	
Vinyl Chloride	0.8871	0.9513	1.0019	0.9129	0.8872	1.1307	1.0595	0.9789	0.9942	AVRG		1.02231		0.9782	8	15	0.05	0.99	
Bromomethane		0.4981m	0.5747	0.4665	0.4524	0.5383	0.5160	0.4937	0.5160	AVRG		1.97254		0.5070	8	15	0.05	0.99	
Chloroethane		0.7052	0.6161	0.5678	0.4631	0.5966	0.5465	0.5283	0.5237	AVRG		1.75927		0.5684	13	15	0.05	0.99	
Trichlorofluoromethane		0.6799	0.7087	0.6587	0.6243	0.8054	0.7530	0.6843	0.6989	AVRG		1.42521		0.7017	8	15	0.05	0.99	
Acetone				0.3953	0.3583	0.2918	0.2818	0.2980	0.3206	AVRG		3.08358		0.3243	14	15	0.05	0.99	
1,1-Dichloroethene		0.3480	0.5008	0.4908	0.4341	0.5199	0.5101	0.4913	0.5048	AVRG		2.10536		0.4750	12	15	0.05	0.99	
Iodomethane			0.2633	0.3064	0.3898	0.5675	0.6161	0.6070	0.6432	QUAD	2.11604	1.65576	-0.00197	0.4848	0.999	15	0.05	0.99	
Methylene Chloride		0.7746	0.7235	0.7242	0.7005	0.7386	0.7000	0.6875	0.7221	AVRG		1.38623		0.7214	4	15	0.05	0.99	
Carbon Disulfide		1.8372	2.2159	2.1329	1.9816	2.3654	2.2686	2.1810	2.2537	AVRG		0.46414		2.1545	8	15	0.05	0.99	
MTBE		1.8427	1.7628	1.6487	1.6803	1.9370	1.8518	1.8190	1.8911	AVRG		0.55427		1.8042	6	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5034	0.6153	0.5270	0.5171	0.5979	0.5853	0.5588	0.5809	AVRG		1.78346		0.5607	7	15	0.05	0.99	
Vinyl Acetate					1.2081	2.0056	2.0275	1.0372	1.1031	AVRG		0.67737		1.4763	**34**	15	0.05	0.99	rsd
1,1-Dichloroethane		1.2585	1.3704	1.2751	1.2341	1.4267	1.3592	1.3247	1.3931	AVRG		0.75174		1.3302	5	15	0.10	0.99	
2-Butanone			0.5118	0.4767	0.4601	0.4448	0.4177	0.4074	0.4395	AVRG		2.21653		0.4512	8	15	0.05	0.99	
2,2-Dichloropropane		0.5896	0.6552	0.6206	0.5776	0.6710	0.6525	0.6117	0.6179	AVRG		1.60125		0.6245	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6149	0.6824	0.6297	0.6000	0.6898	0.6643	0.6468	0.6782	AVRG		1.53665		0.6508	5	15	0.05	0.99	
Chloroform		1.3337	1.1517	1.0418	0.9891	1.1244	1.0792	1.0424	1.0773	AVRG		0.90501		1.1050	10	15	0.05	0.99	
Bromochloromethane		0.2603	0.2901	0.2729	0.2739	0.3214	0.3138	0.3131	0.3272	AVRG		3.37184		0.2966	9	15	0.05	0.99	
1,1,1-Trichloroethane		0.5468	0.6897	0.6722	0.6381	0.7167	0.7218	0.6866	0.6753	AVRG		1.49613		0.6684	8	15	0.05	0.99	
1,1-Dichloropropene		0.4024	0.5019	0.4981	0.4596	0.5005	0.5064	0.4859	0.4620	AVRG		2.09601		0.4771	7	15	0.05	0.99	
Carbon Tetrachloride		0.2220	0.3158	0.3361	0.3060	0.3254	0.3423	0.3289	0.2976	AVRG		3.23351		0.3093	12	15	0.05	0.99	
1,2-Dichloroethane		0.5312	0.5433	0.5139	0.5129	0.5686	0.5494	0.5388	0.5407	AVRG		1.86102		0.5373	3	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.4940	1.5343	1.4619	1.3935	1.5659	1.4939	1.4331	1.4346	AVRG		0.67733		1.4764	4	15	0.05	0.99	
Trichloroethene		0.3135	0.3737	0.3691	0.3398	0.3618	0.3472	0.3736	0.3715	AVRG		2.80687		0.3563	6	15	0.05	0.99	
1,2-Dichloropropane		0.4959	0.5074	0.4688	0.4571	0.5081	0.4901	0.4861	0.4900	AVRG		2.04943		0.4879	4	15	0.05	0.99	
Bromodichloromethane		0.4761	0.5057	0.4681	0.4607	0.5259	0.5008	0.4944	0.5056	AVRG		2.03182		0.4922	4	15	0.05	0.99	
Dibromomethane		0.2213	0.2515	0.2235	0.2288	0.2652	0.2537	0.2501	0.2558	AVRG		4.10292		0.2437	7	15	0.05	0.99	
4-Methyl-2-Pentanone			0.5531	0.4822	0.4919	0.5910	0.5673	0.5606	0.5788	AVRG		1.83014		0.5464	8	15	0.05	0.99	
cis-1,3-Dichloropropene		0.6024	0.6368	0.5960	0.5872	0.6698	0.6323	0.6265	0.6374	AVRG		1.60370		0.6236	4	15	0.05	0.99	
Toluene		0.9856	1.0398	1.1786	1.1103	1.0205	1.0238	0.9738	0.9466	AVRG		0.96630		1.0349	7	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6631	0.6595	0.6418	0.6652	0.7426	0.7315	0.6991	0.7252	AVRG		1.44717		0.6910	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.2148	0.2207	0.2072	0.2073	0.2378	0.2333	0.2264	0.2322	AVRG		4.49555		0.2224	5	15	0.05	0.99	
2-Hexanone			0.5124	0.4799	0.4626	0.4969	0.4837	0.4727	0.4923	AVRG		2.05860		0.4858	3	15	0.05	0.99	
1,3-Dichloropropane		0.6815	0.7001	0.6488	0.6654	0.7489	0.7366	0.7191	0.7403	AVRG		1.41827		0.7051	5	15	0.05	0.99	
Tetrachloroethene		0.2828	0.3738	0.3636	0.3348	0.3459	0.3747	0.3611	0.3305	AVRG		2.89101		0.3459	9	15	0.05	0.99	
Dibromochloromethane		0.3539	0.3932	0.3659	0.3657	0.4283	0.4223	0.4121	0.4221	AVRG		2.52887		0.3954	8	15	0.05	0.99	
1,2-Dibromoethane		0.3220	0.3808	0.3609	0.3683	0.4241	0.4197	0.4033	0.4164	AVRG		2.58446		0.3869	9	15	0.05	0.99	
Chlorobenzene		1.0262	1.0857	0.9794	0.9673	1.0854	1.0727	1.0391	1.0212	AVRG		0.96653		1.0346	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3105	0.3559	0.3269	0.3232	0.3626	0.3676	0.3618	0.3585	AVRG		2.89133		0.3459	6	15	0.05	0.99	
Ethylbenzene		1.8521	2.0005	1.9213	1.8343	1.8776	1.9187	1.8107	1.6925	AVRG		0.53663		1.8635	5	15	0.05	0.99	
m,p-Xylenes	0.6689	0.6306	0.6920	0.6939	0.6668	0.6568	0.6752	0.6381	0.5904	AVRG		1.52215		0.6570	5	15	0.05	0.99	
o-Xylene		0.6433	0.6674	0.6713	0.6431	0.6613	0.6763	0.6410	0.6061	AVRG		1.53558		0.6512	4	15	0.05	0.99	
Styrene		1.1338	1.2490	1.1403	1.1414	1.2543	1.2449	1.1801	1.1663	AVRG		0.84121		1.1888	4	15	0.05	0.99	
Bromoform		0.2349	0.2643	0.2432	0.2578	0.2956	0.2949	0.2876	0.2929	AVRG		3.68474		0.2714	9	15	0.10	0.99	
Isopropylbenzene		3.1907	3.5284	3.3646	3.1636	3.2479	3.4516	3.2783	2.9069	AVRG		0.30614		3.2665	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.9599	0.9087	0.8036	0.8776	1.0791	1.0511	0.9155	0.9342	AVRG		1.06246		0.9412	10	15	0.30	0.99	
1,2,3-Trichloropropane		0.9685	0.9189	0.8487	0.8603	0.9818	0.9356	0.8992	0.8954	AVRG		1.09462		0.9136	5	15	0.05	0.99	
Propylbenzene		4.3101	4.6513	4.4056	4.1873	4.2283	4.4594	4.1717	3.7040	AVRG		0.23448		4.2647	7	15	0.05	0.99	
Bromobenzene		0.8081	0.8911	0.8564	0.8262	0.9559	0.9472	0.9017	0.8894	AVRG		1.13059		0.8845	6	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.7587	2.8838	2.7952	2.6280	2.7326	2.7825	2.6606	2.3692	AVRG		0.37019		2.7013	6	15	0.05	0.99	
2-Chlorotoluene		3.0925	3.1957	2.8991	2.7035	2.9645	2.9342	2.7835	2.5525	AVRG		0.34594		2.8907	7	15	0.05	0.99	
4-Chlorotoluene		2.9945	3.0070	2.6480	2.5894	2.7740	2.7643	2.6642	2.5013	AVRG		0.36459		2.7428	7	15	0.05	0.99	
tert-Butylbenzene		2.0959	2.2586	2.1555	2.0563	2.1153	2.2614	2.1637	1.8725	AVRG		0.47116		2.1224	6	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.8859	2.9236	2.9257	2.7624	2.8005	2.8327	2.6903	2.5030	AVRG		0.35836		2.7905	5	15	0.05	0.99	
sec-Butylbenzene		3.0771	3.5544	3.5133	3.2045	3.2342	3.5171	3.3395	2.9237	AVRG		0.30345		3.2955	7	15	0.05	0.99	
para-Isopropyl Toluene		2.5921	2.7653	2.6481	2.4663	2.5556	2.6975	2.5998	2.3142	AVRG		0.38762		2.5799	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.5381	1.6866	1.5352	1.4636	1.6278	1.6055	1.5759	1.5079	AVRG		0.63792		1.5676	5	15	0.05	0.99	
1,4-Dichlorobenzene		1.6780	1.7525	1.5542	1.5378	1.7267	1.6936	1.6183	1.5769	AVRG		0.60892		1.6423	5	15	0.05	0.99	
n-Butylbenzene		2.6320	2.7602	2.6553	2.4553	2.5151	2.6873	2.5971	2.2981	AVRG		0.38834		2.5751	6	15	0.05	0.99	
1,2-Dichlorobenzene		1.5331	1.5187	1.4267	1.4008	1.5876	1.5551	1.5086	1.4678	AVRG		0.66676		1.4998	4	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1652	0.1336	0.1517	0.1713	0.1697	0.1623	0.1661	AVRG		6.25058		0.1600	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.0034	0.8829	0.8119	0.8084	0.9164	0.9035	0.8982	0.8686	AVRG		1.12783		0.8867	7	15	0.05	0.99	
Hexachlorobutadiene			0.2878	0.2905	0.2638	0.2719	0.3130	0.3101	0.2634	AVRG		3.49917		0.2858	7	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.8799	1.8182	1.7200	1.7448	2.0430	2.0081	1.9450	1.9629	AVRG		0.52904		1.8902	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7229	0.7418	0.6910	0.6958	0.8029	0.7992	0.7930	0.7811	AVRG		1.32723		0.7534	6	15	0.05	0.99	
Dibromofluoromethane	0.5749	0.5652	0.5619	0.5609	0.5627	0.5613	0.5695	0.5654	0.5860	AVRG		1.76204		0.5675	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.4074	0.4080	0.4067	0.3908	0.4007	0.3964	0.3859	0.3847	0.3725	AVRG		2.53295		0.3948	3	15	0.05	0.99	
Toluene-d8	1.4162	1.4046	1.4140	1.4055	1.4132	1.4016	1.4212	1.4115	1.4191	AVRG		0.70827		1.4119	0	15	0.05	0.99	
Bromofluorobenzene	1.0908	1.1017	1.0830	1.0935	1.0812	1.0846	1.0831	1.0776	1.0653	AVRG		0.92205		1.0845	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-4	2.000	1	5.000	-7	10.00	-10	20.00	13	50.00	9	75.00	-2	100.0	0
Chloromethane			1.000	12	2.000	6	5.000	-9	10.00	-11	20.00	7	50.00	0	75.00	-4	100.0	-1
Vinyl Chloride	0.500	-9	1.000	-3	2.000	2	5.000	-7	10.00	-9	20.00	16	50.00	8	75.00	0	100.0	2
Bromomethane			1.000	-2	2.000	13	5.000	-8	10.00	-11	20.00	6	50.00	2	75.00	-3	100.0	2
Chloroethane			1.000	**24**	2.000	8	5.000	0	10.00	-19	20.00	5	50.00	-4	75.00	-7	100.0	-8
Trichlorofluoromethane			1.000	-3	2.000	1	5.000	-6	10.00	-11	20.00	15	50.00	7	75.00	-2	100.0	0
Acetone							5.000	**22**	10.00	10	20.00	-10	50.00	-13	75.00	-8	100.0	-1
1,1-Dichloroethene			0.500	**-27**	2.000	5	5.000	3	10.00	-9	20.00	9	50.00	7	75.00	3	100.0	6
Iodomethane					2.000	**49**	5.000	-7	10.00	-15	20.00	3	50.00	3	75.00	-2	100.0	0
Methylene Chloride			0.500	7	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	-3	75.00	-5	100.0	0
Carbon Disulfide			0.500	-15	2.000	3	5.000	-1	10.00	-8	20.00	10	50.00	5	75.00	1	100.0	5
MTBE			0.500	2	2.000	-2	5.000	-9	10.00	-7	20.00	7	50.00	3	75.00	1	100.0	5
trans-1,2-Dichloroethene			0.500	-10	2.000	10	5.000	-6	10.00	-8	20.00	7	50.00	4	75.00	0	100.0	4
Vinyl Acetate									10.00	-18	20.00	**36**	50.00	**37**	75.00	**-30**	100.0	**-25**
1,1-Dichloroethane			0.500	-5	2.000	3	5.000	-4	10.00	-7	20.00	7	50.00	2	75.00	0	100.0	5
2-Butanone					2.000	13	5.000	6	10.00	2	20.00	-1	50.00	-7	75.00	-10	100.0	-3
2,2-Dichloropropane			0.500	-6	2.000	5	5.000	-1	10.00	-8	20.00	7	50.00	4	75.00	-2	100.0	-1
cis-1,2-Dichloroethene			0.500	-6	2.000	5	5.000	-3	10.00	-8	20.00	6	50.00	2	75.00	-1	100.0	4
Chloroform			0.500	**21**	2.000	4	5.000	-6	10.00	-10	20.00	2	50.00	-2	75.00	-6	100.0	-3
Bromochloromethane			0.500	-12	2.000	-2	5.000	-8	10.00	-8	20.00	8	50.00	6	75.00	6	100.0	10
1,1,1-Trichloroethane			0.500	-18	2.000	3	5.000	1	10.00	-5	20.00	7	50.00	8	75.00	3	100.0	1
1,1-Dichloropropene			0.500	-16	2.000	5	5.000	4	10.00	-4	20.00	5	50.00	6	75.00	2	100.0	-3
Carbon Tetrachloride			0.500	**-28**	2.000	2	5.000	9	10.00	-1	20.00	5	50.00	11	75.00	6	100.0	-4
1,2-Dichloroethane			0.500	-1	2.000	1	5.000	-4	10.00	-5	20.00	6	50.00	2	75.00	0	100.0	1
Benzene			0.500	1	2.000	4	5.000	-1	10.00	-6	20.00	6	50.00	1	75.00	-3	100.0	-3
Trichloroethene			0.500	-12	2.000	5	5.000	4	10.00	-5	20.00	2	50.00	-3	75.00	5	100.0	4
1,2-Dichloropropane			0.500	2	2.000	4	5.000	-4	10.00	-6	20.00	4	50.00	0	75.00	0	100.0	0
Bromodichloromethane			0.500	-3	2.000	3	5.000	-5	10.00	-6	20.00	7	50.00	2	75.00	0	100.0	3
Dibromomethane			0.500	-9	2.000	3	5.000	-8	10.00	-6	20.00	9	50.00	4	75.00	3	100.0	5
4-Methyl-2-Pentanone					2.000	1	5.000	-12	10.00	-10	20.00	8	50.00	4	75.00	3	100.0	6
cis-1,3-Dichloropropene			0.500	-3	2.000	2	5.000	-4	10.00	-6	20.00	7	50.00	1	75.00	0	100.0	2
Toluene			0.500	-5	2.000	0	5.000	14	10.00	7	20.00	-1	50.00	-1	75.00	-6	100.0	-9
trans-1,3-Dichloropropene			0.500	-4	2.000	-5	5.000	-7	10.00	-4	20.00	7	50.00	6	75.00	1	100.0	5
1,1,2-Trichloroethane			0.500	-3	2.000	-1	5.000	-7	10.00	-7	20.00	7	50.00	5	75.00	2	100.0	4
2-Hexanone					2.000	5	5.000	-1	10.00	-5	20.00	2	50.00	0	75.00	-3	100.0	1
1,3-Dichloropropane			0.500	-3	2.000	-1	5.000	-8	10.00	-6	20.00	6	50.00	4	75.00	2	100.0	5
Tetrachloroethene			0.500	-18	2.000	8	5.000	5	10.00	-3	20.00	0	50.00	8	75.00	4	100.0	-4
Dibromochloromethane			0.500	-10	2.000	-1	5.000	-7	10.00	-8	20.00	8	50.00	7	75.00	4	100.0	7
1,2-Dibromoethane			0.500	-17	2.000	-2	5.000	-7	10.00	-5	20.00	10	50.00	8	75.00	4	100.0	8
Chlorobenzene			0.500	-1	2.000	5	5.000	-5	10.00	-7	20.00	5	50.00	4	75.00	0	100.0	-1
1,1,1,2-Tetrachloroethane			0.500	-10	2.000	3	5.000	-5	10.00	-7	20.00	5	50.00	6	75.00	5	100.0	4
Ethylbenzene			0.500	-1	2.000	7	5.000	3	10.00	-2	20.00	1	50.00	3	75.00	-3	100.0	-9

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	2	1.000	-4	4.000	5	10.00	6	20.00	1	40.00	0	100.0	3	150.0	-3	200.0	-10
o-Xylene			0.500	-1	2.000	2	5.000	3	10.00	-1	20.00	2	50.00	4	75.00	-2	100.0	-7
Styrene			0.500	-5	2.000	5	5.000	-4	10.00	-4	20.00	6	50.00	5	75.00	-1	100.0	-2
Bromoform			0.500	-13	2.000	-3	5.000	-10	10.00	-5	20.00	9	50.00	9	75.00	6	100.0	8
Isopropylbenzene			0.500	-2	2.000	8	5.000	3	10.00	-3	20.00	-1	50.00	6	75.00	0	100.0	-11
1,1,2,2-Tetrachloroethane			0.500	2	2.000	-3	5.000	-15	10.00	-7	20.00	15	50.00	12	75.00	-3	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	1	5.000	-7	10.00	-6	20.00	7	50.00	2	75.00	-2	100.0	-2
Propylbenzene			0.500	1	2.000	9	5.000	3	10.00	-2	20.00	-1	50.00	5	75.00	-2	100.0	-13
Bromobenzene			0.500	-9	2.000	1	5.000	-3	10.00	-7	20.00	8	50.00	7	75.00	2	100.0	1
1,3,5-Trimethylbenzene			0.500	2	2.000	7	5.000	3	10.00	-3	20.00	1	50.00	3	75.00	-2	100.0	-12
2-Chlorotoluene			0.500	7	2.000	11	5.000	0	10.00	-6	20.00	3	50.00	2	75.00	-4	100.0	-12
4-Chlorotoluene			0.500	9	2.000	10	5.000	-3	10.00	-6	20.00	1	50.00	1	75.00	-3	100.0	-9
tert-Butylbenzene			0.500	-1	2.000	6	5.000	2	10.00	-3	20.00	0	50.00	7	75.00	2	100.0	-12
1,2,4-Trimethylbenzene			0.500	3	2.000	5	5.000	5	10.00	-1	20.00	0	50.00	2	75.00	-4	100.0	-10
sec-Butylbenzene			0.500	-7	2.000	8	5.000	7	10.00	-3	20.00	-2	50.00	7	75.00	1	100.0	-11
para-Isopropyl Toluene			0.500	0	2.000	7	5.000	3	10.00	-4	20.00	-1	50.00	5	75.00	1	100.0	-10
1,3-Dichlorobenzene			0.500	-2	2.000	8	5.000	-2	10.00	-7	20.00	4	50.00	2	75.00	1	100.0	-4
1,4-Dichlorobenzene			0.500	2	2.000	7	5.000	-5	10.00	-6	20.00	5	50.00	3	75.00	-1	100.0	-4
n-Butylbenzene			0.500	2	2.000	7	5.000	3	10.00	-5	20.00	-2	50.00	4	75.00	1	100.0	-11
1,2-Dichlorobenzene			0.500	2	2.000	1	5.000	-5	10.00	-7	20.00	6	50.00	4	75.00	1	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	3	5.000	-16	10.00	-5	20.00	7	50.00	6	75.00	1	100.0	4
1,2,4-Trichlorobenzene			0.500	13	2.000	0	5.000	-8	10.00	-9	20.00	3	50.00	2	75.00	1	100.0	-2
Hexachlorobutadiene					2.000	1	5.000	2	10.00	-8	20.00	-5	50.00	10	75.00	9	100.0	-8
Naphthalene			0.500	-1	2.000	-4	5.000	-9	10.00	-8	20.00	8	50.00	6	75.00	3	100.0	4
1,2,3-Trichlorobenzene			0.500	-4	2.000	-2	5.000	-8	10.00	-8	20.00	7	50.00	6	75.00	5	100.0	4
Dibromofluoromethane	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	3
1,2-Dichloroethane-d4	50.00	3	50.00	3	50.00	3	50.00	-1	50.00	1	50.00	0	50.00	-2	50.00	-3	50.00	-6
Toluene-d8	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	1	50.00	0	50.00	1
Bromofluorobenzene	50.00	1	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1	50.00	-2

BO 09/09/09 : All manual integrations made due to spliting of peaks, fronting/tailing of peaks.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 499361940002 Cal Date : 09-SEP-2009 Type : WATER

ICV 499363592008 (ji908 09-SEP-2009) stds: S12922 (10000X), S12589 (10000X), S12693 (10000X), S12845 (10000X), S12692 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	29.32	ug/L	17	25	
Chloromethane	25.00	24.90	ug/L	0	25	
Vinyl Chloride	25.00	26.28	ug/L	5	25	
Bromomethane	25.00	31.48	ug/L	**26**	25	v+
Chloroethane	25.00	27.31	ug/L	9	25	
Trichlorofluoromethane	25.00	28.98	ug/L	16	25	
Acetone	25.00	18.24	ug/L	-27	25	v-
1,1-Dichloroethene	25.00	28.82	ug/L	15	25	
Iodomethane	25.00	31.45	ug/L	**26**	25	v+
Methylene Chloride	25.00	26.17	ug/L	5	25	
Carbon Disulfide	25.00	26.03	ug/L	4	25	
MTBE	25.00	24.63	ug/L	-1	25	
trans-1,2-Dichloroethene	25.00	28.76	ug/L	15	25	
Vinyl Acetate	25.00	38.34	ug/L	**53**	25	v+
1,1-Dichloroethane	25.00	26.61	ug/L	6	25	
2-Butanone	25.00	22.86	ug/L	-9	25	
2,2-Dichloropropane	25.00	36.55	ug/L	**46**	25	v+
cis-1,2-Dichloroethene	25.00	26.30	ug/L	5	25	
Chloroform	25.00	26.11	ug/L	4	25	
Bromochloromethane	25.00	27.34	ug/L	9	25	
1,1,1-Trichloroethane	25.00	28.43	ug/L	14	25	
1,1-Dichloropropene	25.00	29.41	ug/L	18	25	
Carbon Tetrachloride	25.00	30.22	ug/L	**21**	25	
1,2-Dichloroethane	25.00	27.43	ug/L	10	25	
Benzene	25.00	27.27	ug/L	9	25	
Trichloroethene	25.00	26.38	ug/L	6	25	
1,2-Dichloropropane	25.00	26.11	ug/L	4	25	
Bromodichloromethane	25.00	27.62	ug/L	10	25	
Dibromomethane	25.00	27.33	ug/L	9	25	
4-Methyl-2-Pentanone	25.00	26.31	ug/L	5	25	
cis-1,3-Dichloropropene	25.00	29.76	ug/L	19	25	
Toluene	25.00	26.06	ug/L	4	25	
trans-1,3-Dichloropropene	25.00	26.81	ug/L	7	25	
1,1,2-Trichloroethane	25.00	27.24	ug/L	9	25	
2-Hexanone	25.00	24.55	ug/L	-2	25	
1,3-Dichloropropane	25.00	27.44	ug/L	10	25	
Tetrachloroethene	25.00	29.54	ug/L	18	25	
Dibromochloromethane	25.00	27.93	ug/L	12	25	
1,2-Dibromoethane	25.00	27.99	ug/L	12	25	
Chlorobenzene	25.00	27.18	ug/L	9	25	
1,1,1,2-Tetrachloroethane	25.00	28.01	ug/L	12	25	
Ethylbenzene	25.00	27.83	ug/L	11	25	
m,p-Xylenes	50.00	55.10	ug/L	10	25	
o-Xylene	25.00	27.21	ug/L	9	25	
Styrene	25.00	27.51	ug/L	10	25	
Bromoform	25.00	27.68	ug/L	11	25	
Isopropylbenzene	25.00	25.46	ug/L	2	25	
1,1,2,2-Tetrachloroethane	25.00	29.72	ug/L	19	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	27.54	ug/L	10	25	
Propylbenzene	25.00	28.98	ug/L	16	25	
Bromobenzene	25.00	27.73	ug/L	11	25	
1,3,5-Trimethylbenzene	25.00	28.85	ug/L	15	25	
2-Chlorotoluene	25.00	28.27	ug/L	13	25	
4-Chlorotoluene	25.00	27.28	ug/L	9	25	
tert-Butylbenzene	25.00	29.55	ug/L	18	25	
1,2,4-Trimethylbenzene	25.00	28.01	ug/L	12	25	
sec-Butylbenzene	25.00	30.70	ug/L	**23**	25	
para-Isopropyl Toluene	25.00	29.18	ug/L	17	25	
1,3-Dichlorobenzene	25.00	27.77	ug/L	11	25	
1,4-Dichlorobenzene	25.00	27.38	ug/L	10	25	
n-Butylbenzene	25.00	31.80	ug/L	**27**	25	v+
1,2-Dichlorobenzene	25.00	27.52	ug/L	10	25	
1,2-Dibromo-3-Chloropropane	25.00	28.72	ug/L	15	25	
1,2,4-Trichlorobenzene	25.00	27.62	ug/L	10	25	
Hexachlorobutadiene	25.00	32.03	ug/L	**28**	25	v+
Naphthalene	25.00	28.17	ug/L	13	25	
1,2,3-Trichlorobenzene	25.00	29.05	ug/L	16	25	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Date : 15-SEP-2009 10:17 Type : WATER
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	kif06	839371979006	.25/.5PPB	15-SEP-2009 10:17	S12951 (200000X), S12913 (200000X), S12914 (200000X), S12952 (100000X), S12947 (2500X)
L2	kif07	839371979007	.5/1PPB	15-SEP-2009 10:45	S12951 (100000X), S12913 (100000X), S12914 (100000X), S12952 (50000X), S12947 (2500X)
L3	kif09	839371979009	5PPB	15-SEP-2009 11:42	S12951 (10000X), S12913 (10000X), S12914 (20000X), S12952 (10000X), S12947 (2500X)
L4	kif10	839371979010	10PPB	15-SEP-2009 12:10	S12951 (5000X), S12913 (5000X), S12914 (10000X), S12952 (5000X), S12947 (2500X)
L5	kif11	839371979011	20PPB	15-SEP-2009 12:38	S12733 (25000X), S12773 (25000X), S12217 (50000X), S12634 (25000X), S12947 (2500X)
L6	kif12	839371979012	50PPB	15-SEP-2009 13:07	S12733 (10000X), S12773 (10000X), S12217 (20000X), S12634 (10000X), S12947 (2500X)
L7	kif13	839371979013	75PPB	15-SEP-2009 13:35	S12733 (6667X), S12773 (6667X), S12217 (13330X), S12634 (6667X), S12947 (2500X)
L8	kif14	839371979014	100PPB	15-SEP-2009 14:03	S12733 (5000X), S12773 (5000X), S12217 (10000X), S12634 (5000X), S12947 (2500X)
L9	kif18	839371979018	2PPB	15-SEP-2009 15:57	S12951 (25000X), S12913 (25000X), S12914 (50000X), S12952 (25000X), S12947 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.5550	0.5402	0.4877	0.5674	0.5367	0.5574	0.5344	0.5047	AVRG		1.86762		0.5354	5	15	0.05	0.99	
Chloromethane		0.5400	0.5252	0.4842	0.5324	0.5164	0.5104	0.5020	0.5177	AVRG		1.93786		0.5160	3	15	0.10	0.99	
Vinyl Chloride	0.4393	0.5089	0.5322	0.4799	0.5588	0.5459	0.5436	0.5231	0.5258	AVRG		1.93246		0.5175	7	15	0.05	0.99	
Bromomethane		0.1971	0.2374	0.2342	0.2710	0.2917	0.3000	0.3023	0.2525	AVRG		3.83472		0.2608	14	15	0.05	0.99	
Chloroethane		0.4181	0.4260	0.3902	0.4295	0.4107	0.4028	0.3900	0.4079	AVRG		2.44251		0.4094	4	15	0.05	0.99	
Trichlorofluoromethane		0.7542	0.7481	0.6722	0.7753	0.7415	0.7551	0.7417	0.7441	AVRG		1.34856		0.7415	4	15	0.05	0.99	
Acetone			0.1525	0.1349	0.1413	0.1329	0.1249	0.1264	0.1543	AVRG		7.23774		0.1382	9	15	0.05	0.99	
1,1-Dichloroethene		0.3671m	0.3669m	0.3783	0.3758	0.3595	0.3824	0.3892	0.3786	AVRG		2.66852		0.3747	3	15	0.05	0.99	
Iodomethane			0.2013	0.2116	0.2434	0.2823	0.3024	0.3181		QUAD	2.08016	3.64182	-0.01792	0.2599	1.000	15	0.05	0.99	
Methylene Chloride		0.6381	0.5147	0.5059	0.5385	0.5055	0.4955	0.4845	0.5410	AVRG		1.89405		0.5280	9	15	0.05	0.99	
Carbon Disulfide		1.2938	1.3967	1.4111	1.4747	1.4065	1.4763	1.4617	1.3510	AVRG		0.70973		1.4090	5	15	0.05	0.99	
MTBE		1.5171	1.5340	1.5199	1.6489	1.5827	1.5379	1.5275	1.4900	AVRG		0.64736		1.5447	3	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4447	0.4575	0.4555	0.4759	0.4523	0.4582	0.4585	0.4488	AVRG		2.19098		0.4564	2	15	0.05	0.99	
Vinyl Acetate			0.9967	0.9900	1.0165	1.0021	1.0281	0.8954	0.8797	AVRG		1.02812		0.9726	6	15	0.05	0.99	
1,1-Dichloroethane		0.9412	0.9545	0.9406	0.9959	0.9385	0.9202	0.8976	0.9352	AVRG		1.06331		0.9405	3	15	0.10	0.99	
2-Butanone			0.2499	0.2360	0.2514	0.2333	0.2197	0.2166	0.2249	AVRG		4.28960		0.2331	6	15	0.05	0.99	
2,2-Dichloropropane		0.6919	0.7346	0.7298	0.7371	0.6885	0.7097	0.7022	0.7131	AVRG		1.40179		0.7134	3	15	0.05	0.99	
cis-1,2-Dichloroethene		0.5762	0.5228	0.5281	0.5703	0.5405	0.5400	0.5388	0.5358	AVRG		1.83809		0.5440	4	15	0.05	0.99	
Chloroform		1.2466	0.8894	0.8619	0.9124	0.8648	0.8537	0.8398	0.9212	AVRG		1.08254		0.9238	14	15	0.05	0.99	
Bromochloromethane		0.2192	0.2302	0.2312	0.2488	0.2443	0.2450	0.2412	0.2237	AVRG		4.24730		0.2354	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.6765	0.7319	0.7184	0.7199	0.6607	0.7097	0.7060	0.7028	AVRG		1.42200		0.7032	3	15	0.05	0.99	
1,1-Dichloropropene		0.4271	0.4252	0.4266	0.4259	0.3832	0.4296	0.4335	0.4225	AVRG		2.37143		0.4217	4	15	0.05	0.99	
Carbon Tetrachloride		0.3299	0.3495	0.3548	0.3514	0.3175	0.3660	0.3743	0.3434	AVRG		2.87072		0.3483	5	15	0.05	0.99	
1,2-Dichloroethane		0.4623	0.4338	0.4392	0.4681	0.4402	0.4266	0.4162	0.4274	AVRG		2.27676		0.4392	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3646	1.3172	1.3260	1.4107	1.3231	1.3386	1.3271	1.3162	AVRG		0.74603		1.3404	2	15	0.05	0.99	
Trichloroethene		0.3161	0.3089	0.3088	0.3267	0.3060	0.3190	0.3257	0.3148	AVRG		3.16693		0.3158	2	15	0.05	0.99	
1,2-Dichloropropane		0.3567	0.3496	0.3567	0.3847	0.3616	0.3616	0.3552	0.3497	AVRG		2.78182		0.3595	3	15	0.05	0.99	
Bromodichloromethane		0.3517	0.3642	0.3807	0.4189	0.4053	0.4073	0.4051	0.3573	AVRG		2.58857		0.3863	7	15	0.05	0.99	
Dibromomethane		0.1777	0.1728	0.1730	0.1921	0.1843	0.1838	0.1843	0.1733	AVRG		5.55050		0.1802	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3058	0.2956	0.3325	0.3160	0.3039	0.3010	0.2760	AVRG		3.28528		0.3044	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4515	0.4938	0.5106	0.5678	0.5468	0.5479	0.5428	0.4732	AVRG		1.93495		0.5168	8	15	0.05	0.99	
Toluene		0.9935	0.9449	0.9407	0.9969	0.9225	0.9570	0.9595	0.9600	AVRG		1.04237		0.9593	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5183m	0.5462	0.5590	0.6245	0.6080	0.5983	0.6012	0.5288	AVRG		1.74507		0.5730	7	15	0.05	0.99	
1,1,2-Trichloroethane		0.1715	0.1732	0.1720	0.1860	0.1764	0.1746	0.1761	0.1695	AVRG		5.71724		0.1749	3	15	0.05	0.99	
2-Hexanone			0.2441	0.2355	0.2610	0.2527	0.2405	0.2433	0.2347	AVRG		4.08931		0.2445	4	15	0.05	0.99	
1,3-Dichloropropane		0.6055	0.6014	0.6032	0.6489	0.6200	0.6109	0.6099	0.6070	AVRG		1.63043		0.6133	3	15	0.05	0.99	
Tetrachloroethene		0.3245	0.3316	0.3343	0.3277	0.2952	0.3462	0.3655	0.3379	AVRG		3.00427		0.3329	6	15	0.05	0.99	
Dibromochloromethane		0.2497	0.2759	0.2878	0.3292	0.3329	0.3392	0.3472	0.2600	AVRG		3.30316		0.3027	13	15	0.05	0.99	
1,2-Dibromoethane		0.2852	0.2908	0.2967	0.3241	0.3166	0.3158	0.3206	0.2893	AVRG		3.27996		0.3049	5	15	0.05	0.99	
Chlorobenzene		1.0616	1.0040	1.0203	1.0982	1.0460	1.0717	1.0803	1.0330	AVRG		0.95066		1.0519	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3121	0.3122	0.3260	0.3560	0.3464	0.3571	0.3627	0.3135	AVRG		2.97830		0.3358	7	15	0.05	0.99	
Ethylbenzene		1.7661	1.7670	1.8103	1.8600	1.7202	1.8777	1.8916	1.7996	AVRG		0.55202		1.8115	3	15	0.05	0.99	
m,p-Xylenes	0.5335	0.5382	0.6022	0.6265	0.6746	0.6485	0.7172	0.7301	0.6026	AVRG		1.58633		0.6304	11	15	0.05	0.99	
o-Xylene		0.5358	0.5813	0.6064	0.6717	0.6486	0.6925	0.6991	0.5908	AVRG		1.59165		0.6283	9	15	0.05	0.99	
Styrene		0.7934	0.9271	0.9839	1.1398	1.1438	1.1992	1.2074	0.8988	AVRG		0.96460		1.0367	15	15	0.05	0.99	
Bromoform		0.1507	0.1739	0.1857	0.2167	0.2285			0.1538	QUAD	0.62697	4.73653	-0.03674	0.1849	0.999	15	0.10	0.99	
Isopropylbenzene		3.8364	4.0380	4.0926	3.9683	3.3373	3.8012	3.8242	3.9784	AVRG		0.25910		3.8595	6	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		1.1263	1.0430	0.9990	1.0059	0.8594	0.8324	0.8053	0.9982	AVRG		1.04308		0.9587	12	15	0.30	0.99	
1,2,3-Trichloropropane		1.1893m	1.1068	1.0688	1.0691	0.9239	0.8863	0.8655	1.0776m	AVRG		0.97712		1.0234	11	15	0.05	0.99	
Propylbenzene		3.8856	3.8295	3.9584	3.9379	3.5840	4.1550	4.2608	3.9471	AVRG		0.25350		3.9448	5	15	0.05	0.99	
Bromobenzene		1.1767	1.0539	1.0455	1.0644	0.9148	0.9214	0.9128	1.0865	AVRG		0.97846		1.0220	9	15	0.05	0.99	
1,3,5-Trimethylbenzene		3.0470	2.8163	2.8373	2.7935	2.3605	2.6066	2.6759	2.8022	AVRG		0.36464		2.7424	7	15	0.05	0.99	
2-Chlorotoluene		3.2502	3.2087	3.2380	3.2497	2.8072	2.9513	2.9305	3.2435	AVRG		0.32155		3.1099	6	15	0.05	0.99	
4-Chlorotoluene		2.6256	2.6312	2.6778	2.8141	2.5386	2.6578	2.6465	2.6654	AVRG		0.37634		2.6572	3	15	0.05	0.99	
tert-Butylbenzene		2.0915	2.0413	2.1291	2.1000	1.9884	2.3675	2.5230	2.1287	AVRG		0.46058		2.1712	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.9553	2.7418	2.7395	2.7191	2.2666	2.4347	2.4687	2.7814	AVRG		0.37902		2.6384	9	15	0.05	0.99	
sec-Butylbenzene		3.4302	2.9668	2.9877	2.8529	2.6843	3.3438	3.5918	3.1694	AVRG		0.31965		3.1284	10	15	0.05	0.99	
para-Isopropyl Toluene		2.6559	2.5101	2.4745	2.3667	2.0860	2.5242	2.7209	2.6141	AVRG		0.40095		2.4941	8	15	0.05	0.99	
1,3-Dichlorobenzene		1.7500	1.6533	1.6965	1.7623	1.5890	1.6652	1.6626	1.7425	AVRG		0.59166		1.6902	4	15	0.05	0.99	
1,4-Dichlorobenzene		1.7406	1.5844	1.6055	1.7096	1.5973	1.6611	1.6803	1.6550	AVRG		0.60452		1.6542	3	15	0.05	0.99	
n-Butylbenzene		2.8972	2.5693	2.4775	2.2433	1.7429			2.6686	QUAD	0.24700	0.31358	0.002947	2.4331	1.000	15	0.05	0.99	
1,2-Dichlorobenzene		1.6721	1.5903	1.6167	1.6836	1.5426	1.5829	1.5786	1.6287	AVRG		0.62037		1.6119	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.1815m	0.1919	0.1790	0.1933	0.1725	0.1657	0.1613	0.1620	AVRG		5.68527		0.1759	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		1.3478	1.1248	1.1089	1.1206	0.9023	0.9666	0.9439	1.1863	AVRG		0.91942		1.0876	13	15	0.05	0.99	
Hexachlorobutadiene		0.4608	0.4341	0.4465	0.4072	0.3410	0.4425	0.4893	0.4774	AVRG		2.28653		0.4373	11	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		3.2425	2.9446	2.8433	2.9010	2.3703	2.3100	2.2295	2.9820	AVRG		0.36658		2.7279	14	15	0.05	0.99	
1,2,3-Trichlorobenzene		1.2036	1.0478	1.0475	1.0437	0.8549	0.8950	0.8781	1.0924	AVRG		0.99217		1.0079	12	15	0.05	0.99	
Dibromofluoromethane	0.4483	0.4461	0.4556	0.4489	0.4502	0.4469	0.4473	0.4406	0.4409	AVRG		2.23607		0.4472	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3792	0.3822	0.3804	0.3802	0.3782	0.3724	0.3638	0.3545	0.3722	AVRG		2.67602		0.3737	2	15	0.05	0.99	
Toluene-d8	1.4953	1.4947	1.4921	1.4896	1.4839	1.4686	1.4589	1.4520	1.4953	AVRG		0.67516		1.4811	1	15	0.05	0.99	
Bromofluorobenzene	1.3750	1.3740	1.3340	1.3031	1.2286	1.1123	1.0781	1.0504	1.3264	AVRG		0.80487		1.2424	10	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	4	5.000	1	10.00	-9	20.00	6	50.00	0	75.00	4	100.0	0	2.000	-6
Chloromethane			1.000	5	5.000	2	10.00	-6	20.00	3	50.00	0	75.00	-1	100.0	-3	2.000	0
Vinyl Chloride	0.500	-15	1.000	-2	5.000	3	10.00	-7	20.00	8	50.00	5	75.00	5	100.0	1	2.000	2
Bromomethane			1.000	**-24**	5.000	-9	10.00	-10	20.00	4	50.00	12	75.00	15	100.0	16	2.000	-3
Chloroethane			1.000	2	5.000	4	10.00	-5	20.00	5	50.00	0	75.00	-2	100.0	-5	2.000	0
Trichlorofluoromethane			1.000	2	5.000	1	10.00	-9	20.00	5	50.00	0	75.00	2	100.0	0	2.000	0
Acetone					5.000	10	10.00	-2	20.00	2	50.00	-4	75.00	-10	100.0	-9	2.000	12
1,1-Dichloroethene			0.500	-2	5.000	-2	10.00	1	20.00	0	50.00	-4	75.00	2	100.0	4	2.000	1
Iodomethane					5.000	15	10.00	-3	20.00	-3	50.00	0	75.00	1	100.0	0		
Methylene Chloride			0.500	**21**	5.000	-3	10.00	-4	20.00	2	50.00	-4	75.00	-6	100.0	-8	2.000	2
Carbon Disulfide			0.500	-8	5.000	-1	10.00	0	20.00	5	50.00	0	75.00	5	100.0	4	2.000	-4
MTBE			0.500	-2	5.000	-1	10.00	-2	20.00	7	50.00	2	75.00	0	100.0	-1	2.000	-4
trans-1,2-Dichloroethene			0.500	-3	5.000	0	10.00	0	20.00	4	50.00	-1	75.00	0	100.0	0	2.000	-2
Vinyl Acetate					5.000	2	10.00	2	20.00	5	50.00	3	75.00	6	100.0	-8	2.000	-10
1,1-Dichloroethane			0.500	0	5.000	1	10.00	0	20.00	6	50.00	0	75.00	-2	100.0	-5	2.000	-1
2-Butanone					5.000	7	10.00	1	20.00	8	50.00	0	75.00	-6	100.0	-7	2.000	-4
2,2-Dichloropropane			0.500	-3	5.000	3	10.00	2	20.00	3	50.00	-3	75.00	-1	100.0	-2	2.000	0
cis-1,2-Dichloroethene			0.500	6	5.000	-4	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-1	2.000	-2
Chloroform			0.500	**35**	5.000	-4	10.00	-7	20.00	-1	50.00	-6	75.00	-8	100.0	-9	2.000	0
Bromochloromethane			0.500	-7	5.000	-2	10.00	-2	20.00	6	50.00	4	75.00	4	100.0	2	2.000	-5
1,1,1-Trichloroethane			0.500	-4	5.000	4	10.00	2	20.00	2	50.00	-6	75.00	1	100.0	0	2.000	0
1,1-Dichloropropene			0.500	1	5.000	1	10.00	1	20.00	1	50.00	-9	75.00	2	100.0	3	2.000	0
Carbon Tetrachloride			0.500	-5	5.000	0	10.00	2	20.00	1	50.00	-9	75.00	5	100.0	7	2.000	-1
1,2-Dichloroethane			0.500	5	5.000	-1	10.00	0	20.00	7	50.00	0	75.00	-3	100.0	-5	2.000	-3
Benzene			0.500	2	5.000	-2	10.00	-1	20.00	5	50.00	-1	75.00	0	100.0	-1	2.000	-2
Trichloroethene			0.500	0	5.000	-2	10.00	-2	20.00	3	50.00	-3	75.00	1	100.0	3	2.000	0
1,2-Dichloropropane			0.500	-1	5.000	-3	10.00	-1	20.00	7	50.00	1	75.00	1	100.0	-1	2.000	-3
Bromodichloromethane			0.500	-9	5.000	-6	10.00	-1	20.00	8	50.00	5	75.00	5	100.0	5	2.000	-8
Dibromomethane			0.500	-1	5.000	-4	10.00	-4	20.00	7	50.00	2	75.00	2	100.0	2	2.000	-4
4-Methyl-2-Pentanone					5.000	0	10.00	-3	20.00	9	50.00	4	75.00	0	100.0	-1	2.000	-9
cis-1,3-Dichloropropene			0.500	-13	5.000	-4	10.00	-1	20.00	10	50.00	6	75.00	6	100.0	5	2.000	-8
Toluene			0.500	4	5.000	-2	10.00	-2	20.00	4	50.00	-4	75.00	0	100.0	0	2.000	0
trans-1,3-Dichloropropene			0.500	-10	5.000	-5	10.00	-2	20.00	9	50.00	6	75.00	4	100.0	5	2.000	-8
1,1,2-Trichloroethane			0.500	-2	5.000	-1	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	1	2.000	-3
2-Hexanone					5.000	0	10.00	-4	20.00	7	50.00	3	75.00	-2	100.0	0	2.000	-4
1,3-Dichloropropane			0.500	-1	5.000	-2	10.00	-2	20.00	6	50.00	1	75.00	0	100.0	-1	2.000	-1
Tetrachloroethene			0.500	-3	5.000	0	10.00	0	20.00	-2	50.00	-11	75.00	4	100.0	10	2.000	2
Dibromochloromethane			0.500	-18	5.000	-9	10.00	-5	20.00	9	50.00	10	75.00	12	100.0	15	2.000	-14
1,2-Dibromoethane			0.500	-6	5.000	-5	10.00	-3	20.00	6	50.00	4	75.00	4	100.0	5	2.000	-5
Chlorobenzene			0.500	1	5.000	-5	10.00	-3	20.00	4	50.00	-1	75.00	2	100.0	3	2.000	-2
1,1,1,2-Tetrachloroethane			0.500	-7	5.000	-7	10.00	-3	20.00	6	50.00	3	75.00	6	100.0	8	2.000	-7
Ethylbenzene			0.500	-3	5.000	-2	10.00	0	20.00	3	50.00	-5	75.00	4	100.0	4	2.000	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	-15	1.000	-15	10.00	-4	20.00	-1	40.00	7	100.0	3	150.0	14	200.0	16	4.000	-4
o-Xylene			0.500	-15	5.000	-7	10.00	-3	20.00	7	50.00	3	75.00	10	100.0	11	2.000	-6
Styrene			0.500	**-23**	5.000	-11	10.00	-5	20.00	10	50.00	10	75.00	16	100.0	16	2.000	-13
Bromoform			0.500	**97**	5.000	-6	10.00	-7	20.00	2	50.00	0					2.000	4
Isopropylbenzene			0.500	-1	5.000	5	10.00	6	20.00	3	50.00	-14	75.00	-2	100.0	-1	2.000	3
1,1,2,2-Tetrachloroethane			0.500	17	5.000	9	10.00	4	20.00	5	50.00	-10	75.00	-13	100.0	-16	2.000	4
1,2,3-Trichloropropane			0.500	16	5.000	8	10.00	4	20.00	4	50.00	-10	75.00	-13	100.0	-15	2.000	5
Propylbenzene			0.500	-1	5.000	-3	10.00	0	20.00	0	50.00	-9	75.00	5	100.0	8	2.000	0
Bromobenzene			0.500	15	5.000	3	10.00	2	20.00	4	50.00	-10	75.00	-10	100.0	-11	2.000	6
1,3,5-Trimethylbenzene			0.500	11	5.000	3	10.00	3	20.00	2	50.00	-14	75.00	-5	100.0	-2	2.000	2
2-Chlorotoluene			0.500	5	5.000	3	10.00	4	20.00	4	50.00	-10	75.00	-5	100.0	-6	2.000	4
4-Chlorotoluene			0.500	-1	5.000	-1	10.00	1	20.00	6	50.00	-4	75.00	0	100.0	0	2.000	0
tert-Butylbenzene			0.500	-4	5.000	-6	10.00	-2	20.00	-3	50.00	-8	75.00	9	100.0	16	2.000	-2
1,2,4-Trimethylbenzene			0.500	12	5.000	4	10.00	4	20.00	3	50.00	-14	75.00	-8	100.0	-6	2.000	5
sec-Butylbenzene			0.500	10	5.000	-5	10.00	-4	20.00	-9	50.00	-14	75.00	7	100.0	15	2.000	1
para-Isopropyl Toluene			0.500	6	5.000	1	10.00	-1	20.00	-5	50.00	-16	75.00	1	100.0	9	2.000	5
1,3-Dichlorobenzene			0.500	4	5.000	-2	10.00	0	20.00	4	50.00	-6	75.00	-1	100.0	-2	2.000	3
1,4-Dichlorobenzene			0.500	5	5.000	-4	10.00	-3	20.00	3	50.00	-3	75.00	0	100.0	2	2.000	0
n-Butylbenzene			0.500	**41**	5.000	-5	10.00	-2	20.00	1	50.00	0					2.000	0
1,2-Dichlorobenzene			0.500	4	5.000	-1	10.00	0	20.00	4	50.00	-4	75.00	-2	100.0	-2	2.000	1
1,2-Dibromo-3-Chloropropane			0.500	3	5.000	9	10.00	2	20.00	10	50.00	-2	75.00	-6	100.0	-8	2.000	-8
1,2,4-Trichlorobenzene			0.500	**24**	5.000	3	10.00	2	20.00	3	50.00	-17	75.00	-11	100.0	-13	2.000	9
Hexachlorobutadiene			0.500	5	5.000	-1	10.00	2	20.00	-7	50.00	**-22**	75.00	1	100.0	12	2.000	9
Naphthalene			0.500	19	5.000	8	10.00	4	20.00	6	50.00	-13	75.00	-15	100.0	-18	2.000	9
1,2,3-Trichlorobenzene			0.500	19	5.000	4	10.00	4	20.00	4	50.00	-15	75.00	-11	100.0	-13	2.000	8
Dibromofluoromethane	50.00	0	50.00	0	50.00	2	50.00	0	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-1
1,2-Dichloroethane-d4	50.00	1	50.00	2	50.00	2	50.00	2	50.00	1	50.00	0	50.00	-3	50.00	-5	50.00	0
Toluene-d8	50.00	1	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	1
Bromofluorobenzene	50.00	11	50.00	11	50.00	7	50.00	5	50.00	-1	50.00	-10	50.00	-13	50.00	-15	50.00	7

BO 09/15/09 : All manual integrations made due to fronting/tailing of peaks, or fixing baseline due to negative peaks.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA11 Name : 8260GX11
Calnum : 839371979001 Cal Date : 15-SEP-2009 Type : WATER

ICV 839371979019 (kif19 15-SEP-2009) stds: S12589 (10000X), S12845 (10000X), S12693 (10000X), S12922 (10000X), S12947 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	23.39	ug/L	-6	25	
Chloromethane	25.00	22.20	ug/L	-11	25	
Vinyl Chloride	25.00	22.02	ug/L	-12	25	
Bromomethane	25.00	28.16	ug/L	13	25	
Chloroethane	25.00	25.27	ug/L	1	25	
Trichlorofluoromethane	25.00	24.96	ug/L	0	25	
Acetone	25.00	24.84	ug/L	-1	25	
1,1-Dichloroethene	25.00	25.93	ug/L	4	25	
Iodomethane	25.00	28.81	ug/L	15	25	
Methylene Chloride	25.00	25.03	ug/L	0	25	
Carbon Disulfide	25.00	24.76	ug/L	-1	25	
MTBE	25.00	24.19	ug/L	-3	25	
trans-1,2-Dichloroethene	25.00	26.86	ug/L	7	25	
Vinyl Acetate	25.00	24.72	ug/L	-1	25	
1,1-Dichloroethane	25.00	25.86	ug/L	3	25	
2-Butanone	25.00	24.90	ug/L	0	25	
2,2-Dichloropropane	25.00	25.54	ug/L	2	25	
cis-1,2-Dichloroethene	25.00	24.89	ug/L	0	25	
Chloroform	25.00	23.94	ug/L	-4	25	
Bromochloromethane	25.00	25.83	ug/L	3	25	
1,1,1-Trichloroethane	25.00	25.67	ug/L	3	25	
1,1-Dichloropropene	25.00	25.75	ug/L	3	25	
Carbon Tetrachloride	25.00	25.78	ug/L	3	25	
1,2-Dichloroethane	25.00	25.88	ug/L	4	25	
Benzene	25.00	25.98	ug/L	4	25	
Trichloroethene	25.00	25.87	ug/L	3	25	
1,2-Dichloropropane	25.00	25.70	ug/L	3	25	
Bromodichloromethane	25.00	26.95	ug/L	8	25	
Dibromomethane	25.00	25.90	ug/L	4	25	
4-Methyl-2-Pentanone	25.00	25.28	ug/L	1	25	
cis-1,3-Dichloropropene	25.00	27.88	ug/L	12	25	
Toluene	25.00	25.73	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	24.81	ug/L	-1	25	
1,1,2-Trichloroethane	25.00	26.26	ug/L	5	25	
2-Hexanone	25.00	25.42	ug/L	2	25	
1,3-Dichloropropane	25.00	26.57	ug/L	6	25	
Tetrachloroethene	25.00	25.47	ug/L	2	25	
Dibromochloromethane	25.00	27.61	ug/L	10	25	
1,2-Dibromoethane	25.00	26.39	ug/L	6	25	
Chlorobenzene	25.00	25.58	ug/L	2	25	
1,1,1,2-Tetrachloroethane	25.00	26.37	ug/L	5	25	
Ethylbenzene	25.00	25.98	ug/L	4	25	
m,p-Xylenes	50.00	54.14	ug/L	8	25	
o-Xylene	25.00	26.47	ug/L	6	25	
Styrene	25.00	27.54	ug/L	10	25	
Bromoform	25.00	25.16	ug/L	1	25	
Isopropylbenzene	25.00	22.67	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	24.70	ug/L	-1	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	25.34	ug/L	1	25	
Propylbenzene	25.00	25.43	ug/L	2	25	
Bromobenzene	25.00	25.08	ug/L	0	25	
1,3,5-Trimethylbenzene	25.00	25.15	ug/L	1	25	
2-Chlorotoluene	25.00	25.80	ug/L	3	25	
4-Chlorotoluene	25.00	25.72	ug/L	3	25	
tert-Butylbenzene	25.00	24.88	ug/L	0	25	
1,2,4-Trimethylbenzene	25.00	24.91	ug/L	0	25	
sec-Butylbenzene	25.00	23.93	ug/L	-4	25	
para-Isopropyl Toluene	25.00	23.00	ug/L	-8	25	
1,3-Dichlorobenzene	25.00	25.55	ug/L	2	25	
1,4-Dichlorobenzene	25.00	25.18	ug/L	1	25	
n-Butylbenzene	25.00	26.52	ug/L	6	25	
1,2-Dichlorobenzene	25.00	25.60	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	26.24	ug/L	5	25	
1,2,4-Trichlorobenzene	25.00	22.99	ug/L	-8	25	
Hexachlorobutadiene	25.00	22.88	ug/L	-8	25	
Naphthalene	25.00	24.81	ug/L	-1	25	
1,2,3-Trichlorobenzene	25.00	24.22	ug/L	-3	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : QC514490 IDF : 1.0
Seqnum : 469393599025.1 File : giu25 Time : 30-SEP-2009 20:44
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S13055 (10000X), S12693 (10000X), S12925 (10000X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Freon 12	0.3881	0.4271	25.00	27.51	ug/L	10	25	u
Chloromethane	0.4298	0.4234	25.00	24.63	ug/L	-1	25	u
Vinyl Chloride	0.3975	0.3921	25.00	24.66	ug/L	-1	25	u
Bromomethane	0.2463	0.2485	25.00	25.23	ug/L	1	25	u
Chloroethane	0.2623	0.2576	25.00	24.55	ug/L	-2	25	c+ u ***
Trichlorofluoromethane	0.5496	0.5735	25.00	26.09	ug/L	4	25	u
Iodomethane	0.4983	0.5413	25.00	27.16	ug/L	9	25	u
Acetone	0.1368	0.1547	25.00	28.27	ug/L	13	25	u
1,1-Dichloroethene	0.3241	0.3285	25.00	25.34	ug/L	1	25	u
Methylene Chloride	0.4365	0.4322	25.00	24.75	ug/L	-1	25	u
Carbon Disulfide	1.3118	1.1013	25.00	20.99	ug/L	-16	25	u
MTBE	1.2989	1.3172	25.00	25.35	ug/L	1	25	u
trans-1,2-Dichloroethene	0.3994	0.4188	25.00	26.21	ug/L	5	25	u
Vinyl Acetate	0.7945	0.8307	25.00	26.14	ug/L	5	25	u
1,1-Dichloroethane	0.7081	0.7296	25.00	25.76	ug/L	3	25	u
2-Butanone	0.1971	0.2208	25.00	28.00	ug/L	12	25	u
cis-1,2-Dichloroethene	0.4558	0.4646	25.00	25.48	ug/L	2	25	u
2,2-Dichloropropane	0.5399	0.5761	25.00	26.68	ug/L	7	25	u
Chloroform	0.6834	0.6865	25.00	25.11	ug/L	0	25	u
Bromochloromethane	0.2114	0.2244	25.00	26.53	ug/L	6	25	u
1,1,1-Trichloroethane	0.5314	0.5568	25.00	26.19	ug/L	5	25	u
1,1-Dichloropropene	0.3398	0.3683	25.00	27.10	ug/L	8	25	u
Carbon Tetrachloride	0.2851	0.3047	25.00	26.72	ug/L	7	25	u
1,2-Dichloroethane	0.3255	0.3489	25.00	26.79	ug/L	7	25	u
Benzene	1.1511	1.1859	25.00	25.76	ug/L	3	25	u
Trichloroethene	0.2681	0.2776	25.00	25.89	ug/L	4	25	u
1,2-Dichloropropane	0.3010	0.3097	25.00	25.72	ug/L	3	25	u
Bromodichloromethane	0.3281	0.3495	25.00	26.63	ug/L	7	25	u
Dibromomethane	0.1579	0.1709	25.00	27.06	ug/L	8	25	u
4-Methyl-2-Pentanone	0.2602	0.2858	25.00	27.46	ug/L	10	25	u
cis-1,3-Dichloropropene	0.4502	0.5035	25.00	27.96	ug/L	12	25	u
Toluene	0.7973	0.8006	25.00	25.10	ug/L	0	25	u
trans-1,3-Dichloropropene	0.4416	0.4540	25.00	25.70	ug/L	3	25	u
1,1,2-Trichloroethane	0.1371	0.1526	25.00	27.83	ug/L	11	25	u
2-Hexanone	0.1976	0.2181	25.00	27.59	ug/L	10	25	u
1,3-Dichloropropane	0.4586	0.5117	25.00	27.90	ug/L	12	25	u
Tetrachloroethene	0.2959	0.3192	25.00	26.96	ug/L	8	25	u
Dibromochloromethane	0.2590	0.2870	25.00	27.71	ug/L	11	25	u
1,2-Dibromoethane	0.2600	0.2900	25.00	27.89	ug/L	12	25	u
Chlorobenzene	0.8605	0.8976	25.00	26.08	ug/L	4	25	u
1,1,1,2-Tetrachloroethane	0.2786	0.2962	25.00	26.58	ug/L	6	25	u
Ethylbenzene	1.4339	1.5094	25.00	26.32	ug/L	5	25	u
m,p-Xylenes	0.5781	0.6116	50.00	52.90	ug/L	6	25	u
o-Xylene	0.5739	0.6032	25.00	26.28	ug/L	5	25	u
Styrene	0.9770	1.0484	25.00	26.83	ug/L	7	25	u
Bromoform	0.1789	0.2032	25.00	28.39	ug/L	14	25	u
Isopropylbenzene	2.3888	2.2701	25.00	23.76	ug/L	-5	25	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6745	25.00	28.40	ug/L	14	25	u
1,2,3-Trichloropropane	0.5719	0.6447	25.00	28.18	ug/L	13	25	u
Propylbenzene	2.8529	3.0672	25.00	26.88	ug/L	8	25	u
Bromobenzene	0.6683	0.7073	25.00	26.46	ug/L	6	25	u
1,3,5-Trimethylbenzene	2.0645	2.2166	25.00	26.84	ug/L	7	25	u
2-Chlorotoluene	1.9799	2.0910	25.00	26.40	ug/L	6	25	u
4-Chlorotoluene	1.8670	1.9405	25.00	25.98	ug/L	4	25	u
tert-Butylbenzene	1.7428	1.9058	25.00	27.34	ug/L	9	25	u
1,2,4-Trimethylbenzene	2.1510	2.2802	25.00	26.50	ug/L	6	25	u
sec-Butylbenzene	2.4704	2.7887	25.00	28.22	ug/L	13	25	u
para-Isopropyl Toluene	2.1994	2.3454	25.00	26.66	ug/L	7	25	u
1,3-Dichlorobenzene	1.2427	1.3045	25.00	26.24	ug/L	5	25	u
1,4-Dichlorobenzene	1.2881	1.3544	25.00	26.29	ug/L	5	25	u
n-Butylbenzene	1.9009	2.1913	25.00	28.82	ug/L	15	25	u
1,2-Dichlorobenzene	1.1869	1.2630	25.00	26.60	ug/L	6	25	u
1,2-Dibromo-3-Chloropropane	0.1121	0.1234	25.00	27.52	ug/L	10	25	u
1,2,4-Trichlorobenzene	0.8807	0.9388	25.00	26.65	ug/L	7	25	u
Hexachlorobutadiene	0.3325	0.3892	25.00	29.26	ug/L	17	25	u
Naphthalene	1.6883	2.0564	25.00	30.45	ug/L	22	25	u
1,2,3-Trichlorobenzene	0.7629	0.8579	25.00	28.11	ug/L	12	25	u

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1130008	1.37	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1707430	1.85	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1634797	1.48	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	929042	-0.29	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 IDF : 1.0
Seqnum : 469393599024.1 File : giu24 Time : 30-SEP-2009 20:13
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12998 (14290X), S13032 (14290X), S12929 (14290X), S12565 (28570X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4212	35.00	37.99	ug/L	9	20	0.0500	
Chloromethane	0.4298	0.4250	35.00	34.61	ug/L	-1	20	0.1000	
Vinyl Chloride	0.3975	0.4159	35.00	36.62	ug/L	5	20	0.0500	
Bromomethane	0.2463	0.2270	35.00	32.25	ug/L	-8	20	0.0500	
Chloroethane	0.2623	0.3329	35.00	44.42	ug/L	**27**	20	0.0500	c+ ***
Trichlorofluoromethane	0.5496	0.5826	35.00	37.10	ug/L	6	20	0.0500	
Acetone	0.1368	0.1178	35.00	30.14	ug/L	-14	20	0.0500	
1,1-Dichloroethene	0.3241	0.3284	35.00	35.46	ug/L	1	20	0.0500	
Iodomethane	0.4983	0.5047	35.00	35.45	ug/L	1	20	0.0500	
Methylene Chloride	0.4365	0.3972	35.00	31.85	ug/L	-9	20	0.0500	
Carbon Disulfide	1.3118	1.3368	35.00	35.67	ug/L	2	20	0.0500	
MTBE	1.2989	1.2936	35.00	34.86	ug/L	0	20	0.0500	
trans-1,2-Dichloroethene	0.3994	0.3796	35.00	33.27	ug/L	-5	20	0.0500	
Vinyl Acetate	0.7945	0.9077	35.00	39.99	ug/L	14	20	0.0500	
1,1-Dichloroethane	0.7081	0.6828	35.00	33.75	ug/L	-4	20	0.1000	
2-Butanone	0.1971	0.1975	35.00	35.07	ug/L	0	20	0.0500	
2,2-Dichloropropane	0.5399	0.5632	35.00	36.52	ug/L	4	20	0.0500	
cis-1,2-Dichloroethene	0.4558	0.4329	35.00	33.24	ug/L	-5	20	0.0500	
Chloroform	0.6834	0.6307	35.00	32.30	ug/L	-8	20	0.0500	
Bromochloromethane	0.2114	0.2093	35.00	34.65	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.5314	0.5269	35.00	34.70	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.3398	0.3449	35.00	35.52	ug/L	1	20	0.0500	
Carbon Tetrachloride	0.2851	0.2874	35.00	35.29	ug/L	1	20	0.0500	
1,2-Dichloroethane	0.3255	0.3183	35.00	34.23	ug/L	-2	20	0.0500	
Benzene	1.1511	1.0863	35.00	33.03	ug/L	-6	20	0.0500	
Trichloroethene	0.2681	0.2539	35.00	33.15	ug/L	-5	20	0.0500	
1,2-Dichloropropane	0.3010	0.2898	35.00	33.69	ug/L	-4	20	0.0500	
Bromodichloromethane	0.3281	0.3141	35.00	33.50	ug/L	-4	20	0.0500	
Dibromomethane	0.1579	0.1567	35.00	34.73	ug/L	-1	20	0.0500	
4-Methyl-2-Pentanone	0.2602	0.2770	35.00	37.26	ug/L	6	20	0.0500	
cis-1,3-Dichloropropene	0.4502	0.4434	35.00	34.47	ug/L	-2	20	0.0500	
Toluene	0.7973	0.7193	35.00	31.58	ug/L	-10	20	0.0500	
trans-1,3-Dichloropropene	0.4416	0.4389	35.00	34.79	ug/L	-1	20	0.0500	
1,1,2-Trichloroethane	0.1371	0.1354	35.00	34.58	ug/L	-1	20	0.0500	
2-Hexanone	0.1976	0.1994	35.00	35.33	ug/L	1	20	0.0500	
1,3-Dichloropropane	0.4586	0.4553	35.00	34.74	ug/L	-1	20	0.0500	
Tetrachloroethene	0.2959	0.2859	35.00	33.81	ug/L	-3	20	0.0500	
Dibromochloromethane	0.2590	0.2571	35.00	34.75	ug/L	-1	20	0.0500	
1,2-Dibromoethane	0.2600	0.2605	35.00	35.07	ug/L	0	20	0.0500	
Chlorobenzene	0.8605	0.7989	35.00	32.49	ug/L	-7	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2786	0.2635	35.00	33.10	ug/L	-5	20	0.0500	
Ethylbenzene	1.4339	1.3225	35.00	32.28	ug/L	-8	20	0.0500	
m,p-Xylenes	0.5781	0.5371	70.00	65.04	ug/L	-7	20	0.0500	
o-Xylene	0.5739	0.5280	35.00	32.20	ug/L	-8	20	0.0500	
Styrene	0.9770	0.9198	35.00	32.95	ug/L	-6	20	0.0500	
Bromoform	0.1789	0.1836	35.00	35.92	ug/L	3	20	0.1000	
Isopropylbenzene	2.3888	2.2340	35.00	32.73	ug/L	-6	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.5991	35.00	35.31	ug/L	1	20	0.3000	
1,2,3-Trichloropropane	0.5719	0.5654	35.00	34.60	ug/L	-1	20	0.0500	
Propylbenzene	2.8529	2.6461	35.00	32.46	ug/L	-7	20	0.0500	
Bromobenzene	0.6683	0.6234	35.00	32.65	ug/L	-7	20	0.0500	
1,3,5-Trimethylbenzene	2.0645	1.8827	35.00	31.92	ug/L	-9	20	0.0500	
2-Chlorotoluene	1.9799	1.7935	35.00	31.70	ug/L	-9	20	0.0500	
4-Chlorotoluene	1.8670	1.7060	35.00	31.98	ug/L	-9	20	0.0500	
tert-Butylbenzene	1.7428	1.5867	35.00	31.87	ug/L	-9	20	0.0500	
1,2,4-Trimethylbenzene	2.1510	1.9298	35.00	31.40	ug/L	-10	20	0.0500	
sec-Butylbenzene	2.4704	2.2802	35.00	32.30	ug/L	-8	20	0.0500	
para-Isopropyl Toluene	2.1994	1.9959	35.00	31.76	ug/L	-9	20	0.0500	
1,3-Dichlorobenzene	1.2427	1.1311	35.00	31.86	ug/L	-9	20	0.0500	
1,4-Dichlorobenzene	1.2881	1.1762	35.00	31.96	ug/L	-9	20	0.0500	
n-Butylbenzene	1.9009	1.7543	35.00	32.30	ug/L	-8	20	0.0500	
1,2-Dichlorobenzene	1.1869	1.0929	35.00	32.23	ug/L	-8	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1121	0.1071	35.00	33.43	ug/L	-4	20	0.0500	
1,2,4-Trichlorobenzene	0.8807	0.7987	35.00	31.74	ug/L	-9	20	0.0500	
Hexachlorobutadiene	0.3325	0.3017	35.00	31.76	ug/L	-9	20	0.0500	
Naphthalene	1.6883	1.6926	35.00	35.09	ug/L	0	20	0.0500	
1,2,3-Trichlorobenzene	0.7629	0.7028	35.00	32.25	ug/L	-8	20	0.0500	
Dibromofluoromethane	0.4079	0.4122	50.00	50.53	ug/L	1	20	0.0500	
1,2-Dichloroethane-d4	0.3076	0.3101	50.00	50.41	ug/L	1	20	0.0500	
Toluene-d8	1.2934	1.2948	50.00	50.06	ug/L	0	20	0.0500	
Bromofluorobenzene	0.8717	0.8774	50.00	50.33	ug/L	1	20	0.0500	

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1126370	1.05	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1709718	1.99	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1641588	1.90	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	936312	0.49	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 IDF : 1.0
Seqnum : 469395137003.3 File : gj103 Time : 01-OCT-2009 10:46
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (12500X), S13055 (12500X), S12693 (12500X), S12925 (12500X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4174	20.00	21.51	ug/L	8	20	0.0500	
Chloromethane	0.4298	0.4377	20.00	20.37	ug/L	2	20	0.1000	
Vinyl Chloride	0.3975	0.3891	20.00	19.58	ug/L	-2	20	0.0500	
Bromomethane	0.2463	0.1965	20.00	15.96	ug/L	-20	20	0.0500	
Chloroethane	0.2623	0.3518	20.00	26.82	ug/L	**34**	20	0.0500	c+ ***
Trichlorofluoromethane	0.5496	0.5703	20.00	20.75	ug/L	4	20	0.0500	
Acetone	0.1368	0.1249	20.00	18.25	ug/L	-9	20	0.0500	
1,1-Dichloroethene	0.3241	0.3438	20.00	21.21	ug/L	6	20	0.0500	
Iodomethane	0.4983	0.4143	20.00	16.63	ug/L	-17	20	0.0500	
Methylene Chloride	0.4365	0.4418	20.00	20.24	ug/L	1	20	0.0500	
Carbon Disulfide	1.3118	1.1421	20.00	17.41	ug/L	-13	20	0.0500	
MTBE	1.2989	1.2751	20.00	19.63	ug/L	-2	20	0.0500	
trans-1,2-Dichloroethene	0.3994	0.4259	20.00	21.33	ug/L	7	20	0.0500	
Vinyl Acetate	0.7945	0.8288	20.00	20.86	ug/L	4	20	0.0500	
1,1-Dichloroethane	0.7081	0.7618	20.00	21.52	ug/L	8	20	0.1000	
2-Butanone	0.1971	0.2034	20.00	20.63	ug/L	3	20	0.0500	
2,2-Dichloropropane	0.5399	0.5944	20.00	22.02	ug/L	10	20	0.0500	
cis-1,2-Dichloroethene	0.4558	0.4704	20.00	20.64	ug/L	3	20	0.0500	
Chloroform	0.6834	0.7104	20.00	20.79	ug/L	4	20	0.0500	
Bromochloromethane	0.2114	0.2220	20.00	21.00	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.5314	0.5902	20.00	22.21	ug/L	11	20	0.0500	
1,1-Dichloropropene	0.3398	0.3809	20.00	22.41	ug/L	12	20	0.0500	
Carbon Tetrachloride	0.2851	0.3181	20.00	22.32	ug/L	12	20	0.0500	
1,2-Dichloroethane	0.3255	0.3567	20.00	21.92	ug/L	10	20	0.0500	
Benzene	1.1511	1.2087	20.00	21.00	ug/L	5	20	0.0500	
Trichloroethene	0.2681	0.2836	20.00	21.16	ug/L	6	20	0.0500	
1,2-Dichloropropane	0.3010	0.3111	20.00	20.67	ug/L	3	20	0.0500	
Bromodichloromethane	0.3281	0.3445	20.00	21.00	ug/L	5	20	0.0500	
Dibromomethane	0.1579	0.1691	20.00	21.42	ug/L	7	20	0.0500	
4-Methyl-2-Pentanone	0.2602	0.2749	20.00	21.13	ug/L	6	20	0.0500	
cis-1,3-Dichloropropene	0.4502	0.5018	20.00	22.30	ug/L	11	20	0.0500	
Toluene	0.7973	0.8362	20.00	20.98	ug/L	5	20	0.0500	
trans-1,3-Dichloropropene	0.4416	0.4572	20.00	20.71	ug/L	4	20	0.0500	
1,1,2-Trichloroethane	0.1371	0.1524	20.00	22.23	ug/L	11	20	0.0500	
2-Hexanone	0.1976	0.2055	20.00	20.80	ug/L	4	20	0.0500	
1,3-Dichloropropane	0.4586	0.5198	20.00	22.67	ug/L	13	20	0.0500	
Tetrachloroethene	0.2959	0.3246	20.00	21.94	ug/L	10	20	0.0500	
Dibromochloromethane	0.2590	0.2765	20.00	21.35	ug/L	7	20	0.0500	
1,2-Dibromoethane	0.2600	0.2885	20.00	22.20	ug/L	11	20	0.0500	
Chlorobenzene	0.8605	0.9132	20.00	21.23	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2786	0.2958	20.00	21.23	ug/L	6	20	0.0500	
Ethylbenzene	1.4339	1.5639	20.00	21.81	ug/L	9	20	0.0500	
m,p-Xylenes	0.5781	0.6285	40.00	43.49	ug/L	9	20	0.0500	
o-Xylene	0.5739	0.6141	20.00	21.40	ug/L	7	20	0.0500	
Styrene	0.9770	1.0488	20.00	21.47	ug/L	7	20	0.0500	
Bromoform	0.1789	0.1830	20.00	20.45	ug/L	2	20	0.1000	
Isopropylbenzene	2.3888	2.3755	20.00	19.89	ug/L	-1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6821	20.00	22.98	ug/L	15	20	0.3000	
1,2,3-Trichloropropane	0.5719	0.6623	20.00	23.16	ug/L	16	20	0.0500	
Propylbenzene	2.8529	3.2151	20.00	22.54	ug/L	13	20	0.0500	
Bromobenzene	0.6683	0.7222	20.00	21.61	ug/L	8	20	0.0500	
1,3,5-Trimethylbenzene	2.0645	2.3017	20.00	22.30	ug/L	11	20	0.0500	
2-Chlorotoluene	1.9799	2.2066	20.00	22.29	ug/L	11	20	0.0500	
4-Chlorotoluene	1.8670	2.0214	20.00	21.65	ug/L	8	20	0.0500	
tert-Butylbenzene	1.7428	1.9611	20.00	22.51	ug/L	13	20	0.0500	
1,2,4-Trimethylbenzene	2.1510	2.3666	20.00	22.00	ug/L	10	20	0.0500	
sec-Butylbenzene	2.4704	2.8503	20.00	23.08	ug/L	15	20	0.0500	
para-Isopropyl Toluene	2.1994	2.3753	20.00	21.60	ug/L	8	20	0.0500	
1,3-Dichlorobenzene	1.2427	1.3291	20.00	21.39	ug/L	7	20	0.0500	
1,4-Dichlorobenzene	1.2881	1.3827	20.00	21.47	ug/L	7	20	0.0500	
n-Butylbenzene	1.9009	2.2132	20.00	23.29	ug/L	16	20	0.0500	
1,2-Dichlorobenzene	1.1869	1.2847	20.00	21.65	ug/L	8	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1121	0.1202	20.00	21.46	ug/L	7	20	0.0500	
1,2,4-Trichlorobenzene	0.8807	0.9119	20.00	20.71	ug/L	4	20	0.0500	
Hexachlorobutadiene	0.3325	0.3672	20.00	22.08	ug/L	10	20	0.0500	
Naphthalene	1.6883	1.9657	20.00	23.29	ug/L	16	20	0.0500	
1,2,3-Trichlorobenzene	0.7629	0.8290	20.00	21.73	ug/L	9	20	0.0500	
Dibromofluoromethane	0.4079	0.4193	50.00	51.39	ug/L	3	20	0.0500	
1,2-Dichloroethane-d4	0.3076	0.3258	50.00	52.97	ug/L	6	20	0.0500	
Toluene-d8	1.2934	1.3323	50.00	51.50	ug/L	3	20	0.0500	
Bromofluorobenzene	0.8717	0.8984	50.00	51.53	ug/L	3	20	0.0500	

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1085092	-2.66	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1665487	-0.65	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1551217	-3.71	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	861724	-7.52	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA07 Run Name : QC514565 IDF : 1.0
Seqnum : 469395137013.3 File : gj113 Time : 01-OCT-2009 16:14
Cal : 469393599002 Caldate : 30-SEP-2009 Caltype : WATER
Standards: S12996 (12500X), S13055 (12500X), S12693 (12500X), S12925 (12500X), S12921 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.3881	0.4094	20.00	21.10	ug/L	5	20	0.0500	u
Chloromethane	0.4298	0.4299	20.00	20.00	ug/L	0	20	0.1000	u
Vinyl Chloride	0.3975	0.3885	20.00	19.55	ug/L	-2	20	0.0500	u
Bromomethane	0.2463	0.2101	20.00	17.06	ug/L	-15	20	0.0500	u
Chloroethane	0.2623	0.3316	20.00	25.29	ug/L	**26**	20	0.0500	c+ u ***
Trichlorofluoromethane	0.5496	0.5590	20.00	20.34	ug/L	2	20	0.0500	u
Iodomethane	0.4983	0.3398	20.00	13.64	ug/L	**-32**	20	0.0500	c- u ***
Acetone	0.1368	0.1216	20.00	17.77	ug/L	-11	20	0.0500	u
1,1-Dichloroethene	0.3241	0.3364	20.00	20.76	ug/L	4	20	0.0500	u
Methylene Chloride	0.4365	0.4332	20.00	19.85	ug/L	-1	20	0.0500	u
Carbon Disulfide	1.3118	1.1129	20.00	16.97	ug/L	-15	20	0.0500	u
MTBE	1.2989	1.2180	20.00	18.75	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.3994	0.4194	20.00	21.00	ug/L	5	20	0.0500	u
Vinyl Acetate	0.7945	0.6283	20.00	15.82	ug/L	**-21**	20	0.0500	c- u ***
1,1-Dichloroethane	0.7081	0.7362	20.00	20.79	ug/L	4	20	0.1000	u
2-Butanone	0.1971	0.1847	20.00	18.74	ug/L	-6	20	0.0500	u
cis-1,2-Dichloroethene	0.4558	0.4596	20.00	20.17	ug/L	1	20	0.0500	u
2,2-Dichloropropane	0.5399	0.5401	20.00	20.01	ug/L	0	20	0.0500	u
Chloroform	0.6834	0.6884	20.00	20.15	ug/L	1	20	0.0500	u
Bromochloromethane	0.2114	0.2146	20.00	20.30	ug/L	1	20	0.0500	u
1,1,1-Trichloroethane	0.5314	0.5742	20.00	21.61	ug/L	8	20	0.0500	u
1,1-Dichloropropene	0.3398	0.3774	20.00	22.21	ug/L	11	20	0.0500	u
Carbon Tetrachloride	0.2851	0.3120	20.00	21.89	ug/L	9	20	0.0500	u
1,2-Dichloroethane	0.3255	0.3384	20.00	20.79	ug/L	4	20	0.0500	u
Benzene	1.1511	1.1887	20.00	20.65	ug/L	3	20	0.0500	u
Trichloroethene	0.2681	0.2876	20.00	21.46	ug/L	7	20	0.0500	u
1,2-Dichloropropane	0.3010	0.3035	20.00	20.16	ug/L	1	20	0.0500	u
Bromodichloromethane	0.3281	0.3375	20.00	20.57	ug/L	3	20	0.0500	u
Dibromomethane	0.1579	0.1624	20.00	20.58	ug/L	3	20	0.0500	u
4-Methyl-2-Pentanone	0.2602	0.2577	20.00	19.81	ug/L	-1	20	0.0500	u
cis-1,3-Dichloropropene	0.4502	0.4815	20.00	21.39	ug/L	7	20	0.0500	u
Toluene	0.7973	0.8278	20.00	20.77	ug/L	4	20	0.0500	u
trans-1,3-Dichloropropene	0.4416	0.4413	20.00	19.99	ug/L	0	20	0.0500	u
1,1,2-Trichloroethane	0.1371	0.1493	20.00	21.78	ug/L	9	20	0.0500	u
2-Hexanone	0.1976	0.1974	20.00	19.98	ug/L	0	20	0.0500	u
1,3-Dichloropropane	0.4586	0.5101	20.00	22.25	ug/L	11	20	0.0500	u
Tetrachloroethene	0.2959	0.3323	20.00	22.46	ug/L	12	20	0.0500	u
Dibromochloromethane	0.2590	0.2700	20.00	20.86	ug/L	4	20	0.0500	u
1,2-Dibromoethane	0.2600	0.2810	20.00	21.62	ug/L	8	20	0.0500	u
Chlorobenzene	0.8605	0.9093	20.00	21.13	ug/L	6	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.2786	0.2947	20.00	21.16	ug/L	6	20	0.0500	u
Ethylbenzene	1.4339	1.5523	20.00	21.65	ug/L	8	20	0.0500	u
m,p-Xylenes	0.5781	0.6235	40.00	43.14	ug/L	8	20	0.0500	u
o-Xylene	0.5739	0.6088	20.00	21.22	ug/L	6	20	0.0500	u
Styrene	0.9770	1.0421	20.00	21.33	ug/L	7	20	0.0500	u
Bromoform	0.1789	0.1777	20.00	19.86	ug/L	-1	20	0.1000	u
Isopropylbenzene	2.3888	2.4114	20.00	20.19	ug/L	1	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.5938	0.6372	20.00	21.46	ug/L	7	20	0.3000	u
1,2,3-Trichloropropane	0.5719	0.6406	20.00	22.40	ug/L	12	20	0.0500	u
Propylbenzene	2.8529	3.2566	20.00	22.83	ug/L	14	20	0.0500	u
Bromobenzene	0.6683	0.7248	20.00	21.69	ug/L	8	20	0.0500	u
1,3,5-Trimethylbenzene	2.0645	2.3239	20.00	22.51	ug/L	13	20	0.0500	u
2-Chlorotoluene	1.9799	2.2075	20.00	22.30	ug/L	11	20	0.0500	u
4-Chlorotoluene	1.8670	2.0188	20.00	21.63	ug/L	8	20	0.0500	u
tert-Butylbenzene	1.7428	2.0123	20.00	23.09	ug/L	15	20	0.0500	u
1,2,4-Trimethylbenzene	2.1510	2.3890	20.00	22.21	ug/L	11	20	0.0500	u
sec-Butylbenzene	2.4704	2.9285	20.00	23.71	ug/L	19	20	0.0500	u
para-Isopropyl Toluene	2.1994	2.4299	20.00	22.10	ug/L	10	20	0.0500	u
1,3-Dichlorobenzene	1.2427	1.3359	20.00	21.50	ug/L	8	20	0.0500	u
1,4-Dichlorobenzene	1.2881	1.3846	20.00	21.50	ug/L	7	20	0.0500	u
n-Butylbenzene	1.9009	2.2478	20.00	23.65	ug/L	18	20	0.0500	u
1,2-Dichlorobenzene	1.1869	1.2871	20.00	21.69	ug/L	8	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1121	0.1123	20.00	20.04	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	0.8807	0.9185	20.00	20.86	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.3325	0.3816	20.00	22.95	ug/L	15	20	0.0500	u
Naphthalene	1.6883	1.9128	20.00	22.66	ug/L	13	20	0.0500	u
1,2,3-Trichlorobenzene	0.7629	0.8344	20.00	21.88	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.4079	0.4139	50.00	50.72	ug/L	1	20	0.0500	u
1,2-Dichloroethane-d4	0.3076	0.3155	50.00	51.29	ug/L	3	20	0.0500	u
Toluene-d8	1.2934	1.3412	50.00	51.85	ug/L	4	20	0.0500	u
Bromofluorobenzene	0.8717	0.8988	50.00	51.55	ug/L	3	20	0.0500	u

ISTD (ICAL giu14)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1114691	1132189	1.57	9.90	9.90	0.00
1,4-Difluorobenzene	1676421	1721584	2.69	11.04	11.04	0.00
Chlorobenzene-d5	1610987	1583957	-1.68	15.17	15.17	0.00
1,4-Dichlorobenzene-d4	931776	866769	-6.98	17.89	17.89	0.00

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC514373 IDF : 1.0
Seqnum : 499393725004.2 File : jiu04 Time : 30-SEP-2009 11:33
Cal : 499361940002 Caldate : 09-SEP-2009 Caltype : WATER
Standards: S12922 (13330X), S12996 (13330X), S12693 (13330X), S13008 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6722	0.7234	18.75	20.18	ug/L	8	20	0.0500	u
Chloromethane	1.3456	1.1616	18.75	16.19	ug/L	-14	20	0.1000	u
Vinyl Chloride	0.9782	0.9241	18.75	17.71	ug/L	-6	20	0.0500	u
Bromomethane	0.5070	0.3463	18.75	12.81	ug/L	**-32**	20	0.0500	c- u v+ ***
Chloroethane	0.5684	0.5579	18.75	18.40	ug/L	-2	20	0.0500	u
Trichlorofluoromethane	0.7017	0.7912	18.75	21.14	ug/L	13	20	0.0500	u
Iodomethane	0.4848	0.4979	18.75	17.40	ug/L	-7	20	0.0500	u v+ ***
Acetone	0.3243	0.2599	18.75	15.03	ug/L	-20	20	0.0500	u v- ***
1,1-Dichloroethene	0.4750	0.5159	18.75	20.36	ug/L	9	20	0.0500	u
Methylene Chloride	0.7214	0.7335	18.75	19.06	ug/L	2	20	0.0500	u
Carbon Disulfide	2.1545	2.0429	18.75	17.78	ug/L	-5	20	0.0500	u
MTBE	1.8042	1.8269	18.75	18.99	ug/L	1	20	0.0500	u
trans-1,2-Dichloroethene	0.5607	0.6146	18.75	20.55	ug/L	10	20	0.0500	u
Vinyl Acetate	1.4763	2.1349	18.75	27.11	ug/L	**45**	20	0.0500	c+ rsd u v+ ***
1,1-Dichloroethane	1.3302	1.4198	18.75	20.01	ug/L	7	20	0.1000	u
2-Butanone	0.4512	0.4133	18.75	17.18	ug/L	-8	20	0.0500	u
cis-1,2-Dichloroethene	0.6508	0.6672	18.75	19.22	ug/L	3	20	0.0500	u
2,2-Dichloropropane	0.6245	0.9174	18.75	27.54	ug/L	**47**	20	0.0500	c+ u v+ ***
Chloroform	1.1050	1.1705	18.75	19.86	ug/L	6	20	0.0500	u
Bromochloromethane	0.2966	0.3168	18.75	20.03	ug/L	7	20	0.0500	u
1,1,1-Trichloroethane	0.6684	0.7894	18.75	22.15	ug/L	18	20	0.0500	u
1,1-Dichloropropene	0.4771	0.5598	18.75	22.00	ug/L	17	20	0.0500	u
Carbon Tetrachloride	0.3093	0.3719	18.75	22.55	ug/L	20	20	0.0500	u
1,2-Dichloroethane	0.5373	0.5869	18.75	20.48	ug/L	9	20	0.0500	u
Benzene	1.4764	1.5678	18.75	19.91	ug/L	6	20	0.0500	u
Trichloroethene	0.3563	0.3707	18.75	19.51	ug/L	4	20	0.0500	u
1,2-Dichloropropane	0.4879	0.5196	18.75	19.97	ug/L	6	20	0.0500	u
Bromodichloromethane	0.4922	0.5394	18.75	20.55	ug/L	10	20	0.0500	u
Dibromomethane	0.2437	0.2698	18.75	20.75	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.5464	0.5745	18.75	19.71	ug/L	5	20	0.0500	u
cis-1,3-Dichloropropene	0.6236	0.7210	18.75	21.68	ug/L	16	20	0.0500	u
Toluene	1.0349	1.0740	18.75	19.46	ug/L	4	20	0.0500	u
trans-1,3-Dichloropropene	0.6910	0.7306	18.75	19.82	ug/L	6	20	0.0500	u
1,1,2-Trichloroethane	0.2224	0.2426	18.75	20.45	ug/L	9	20	0.0500	u
2-Hexanone	0.4858	0.4945	18.75	19.09	ug/L	2	20	0.0500	u
1,3-Dichloropropane	0.7051	0.7755	18.75	20.62	ug/L	10	20	0.0500	u
Tetrachloroethene	0.3459	0.4042	18.75	21.91	ug/L	17	20	0.0500	u
Dibromochloromethane	0.3954	0.4349	18.75	20.62	ug/L	10	20	0.0500	u
1,2-Dibromoethane	0.3869	0.4302	18.75	20.85	ug/L	11	20	0.0500	u
Chlorobenzene	1.0346	1.1191	18.75	20.28	ug/L	8	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3459	0.3848	18.75	20.86	ug/L	11	20	0.0500	u
Ethylbenzene	1.8635	2.0879	18.75	21.01	ug/L	12	20	0.0500	u
m,p-Xylenes	0.6570	0.7265	37.50	41.47	ug/L	11	20	0.0500	u
o-Xylene	0.6512	0.7108	18.75	20.46	ug/L	9	20	0.0500	u
Styrene	1.1888	1.2814	18.75	20.21	ug/L	8	20	0.0500	u
Bromoform	0.2714	0.2873	18.75	19.85	ug/L	6	20	0.1000	u
Isopropylbenzene	3.2665	3.2725	18.75	18.78	ug/L	0	20	0.0500	u
1,1,2,2-Tetrachloroethane	0.9412	1.1004	18.75	21.92	ug/L	17	20	0.3000	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,2,3-Trichloropropane	0.9136	1.0177	18.75	20.89	ug/L	11	20	0.0500	u
Propylbenzene	4.2647	4.9504	18.75	21.76	ug/L	16	20	0.0500	u
Bromobenzene	0.8845	0.9453	18.75	20.04	ug/L	7	20	0.0500	u
1,3,5-Trimethylbenzene	2.7013	3.0572	18.75	21.22	ug/L	13	20	0.0500	u
2-Chlorotoluene	2.8907	3.2217	18.75	20.90	ug/L	11	20	0.0500	u
4-Chlorotoluene	2.7428	2.9670	18.75	20.28	ug/L	8	20	0.0500	u
tert-Butylbenzene	2.1224	2.4665	18.75	21.79	ug/L	16	20	0.0500	u
1,2,4-Trimethylbenzene	2.7905	3.0694	18.75	20.62	ug/L	10	20	0.0500	u
sec-Butylbenzene	3.2955	3.9875	18.75	22.69	ug/L	**21**	20	0.0500	c+ u ***
para-Isopropyl Toluene	2.5799	2.8901	18.75	21.00	ug/L	12	20	0.0500	u
1,3-Dichlorobenzene	1.5676	1.6832	18.75	20.13	ug/L	7	20	0.0500	u
1,4-Dichlorobenzene	1.6423	1.7512	18.75	19.99	ug/L	7	20	0.0500	u
n-Butylbenzene	2.5751	3.1603	18.75	23.01	ug/L	**23**	20	0.0500	c+ u v+ ***
1,2-Dichlorobenzene	1.4998	1.6101	18.75	20.13	ug/L	7	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1600	0.1742	18.75	20.41	ug/L	9	20	0.0500	u
1,2,4-Trichlorobenzene	0.8867	0.9219	18.75	19.50	ug/L	4	20	0.0500	u
Hexachlorobutadiene	0.2858	0.3384	18.75	22.20	ug/L	18	20	0.0500	u v+ ***
Naphthalene	1.8902	2.1550	18.75	21.38	ug/L	14	20	0.0500	u
1,2,3-Trichlorobenzene	0.7534	0.8143	18.75	20.26	ug/L	8	20	0.0500	u
Dibromofluoromethane	0.5675	0.5868	50.00	51.70	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3948	0.4301	50.00	54.47	ug/L	9	20	0.0500	u
Toluene-d8	1.4119	1.4366	50.00	50.87	ug/L	2	20	0.0500	u
Bromofluorobenzene	1.0845	1.0882	50.00	50.17	ug/L	0	20	0.0500	u

ISTD (ICAL ji818)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	520002	822307	58.14	11.03	11.00	-0.03
1,4-Difluorobenzene	857205	1354780	58.05	12.19	12.16	-0.03
Chlorobenzene-d5	685604	1098588	60.24	16.09	16.07	-0.02
1,4-Dichlorobenzene-d4	340706	546800	60.49	18.79	18.77	-0.02

5% spike rule

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure u=use v=ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 215072 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name : QC514336 IDF : 1.0
Seqnum : 839393591011.7 File : kiu11 Time : 30-SEP-2009 11:57
Cal : 839371979001 Caldate : 15-SEP-2009 Caltype : WATER
Standards: S12996 (10000X), S12845 (10000X), S12693 (10000X), S12924 (10000X), S12947 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5354	0.6301	25.00	29.42	ug/L	18	20	0.0500	u
Chloromethane	0.5160	0.6018	25.00	29.16	ug/L	17	20	0.1000	u
Vinyl Chloride	0.5175	0.5993	25.00	28.95	ug/L	16	20	0.0500	u
Bromomethane	0.2608	0.3345	25.00	32.06	ug/L	**28**	20	0.0500	c+ u ***
Chloroethane	0.4094	0.3546	25.00	21.65	ug/L	-13	20	0.0500	u
Trichlorofluoromethane	0.7415	0.8131	25.00	27.41	ug/L	10	20	0.0500	u
Iodomethane	0.2599	0.4535	25.00	41.07	ug/L	**64**	20	0.0500	c+ u ***
Acetone	0.1382	0.1611	25.00	29.16	ug/L	17	20	0.0500	u
1,1-Dichloroethene	0.3747	0.4394	25.00	29.31	ug/L	17	20	0.0500	u
Methylene Chloride	0.5280	0.5914	25.00	28.00	ug/L	12	20	0.0500	u
Carbon Disulfide	1.4090	1.5062	25.00	26.72	ug/L	7	20	0.0500	u
MTBE	1.5447	1.6688	25.00	27.01	ug/L	8	20	0.0500	u
trans-1,2-Dichloroethene	0.4564	0.5573	25.00	30.53	ug/L	**22**	20	0.0500	c+ u ***
Vinyl Acetate	0.9726	0.9690	25.00	24.91	ug/L	0	20	0.0500	u
1,1-Dichloroethane	0.9405	1.0195	25.00	27.10	ug/L	8	20	0.1000	u
2-Butanone	0.2331	0.2606	25.00	27.95	ug/L	12	20	0.0500	u
cis-1,2-Dichloroethene	0.5440	0.6256	25.00	28.75	ug/L	15	20	0.0500	u
2,2-Dichloropropane	0.7134	0.8137	25.00	28.51	ug/L	14	20	0.0500	u
Chloroform	0.9238	0.9971	25.00	26.99	ug/L	8	20	0.0500	u
Bromochloromethane	0.2354	0.2827	25.00	30.02	ug/L	20	20	0.0500	u
1,1,1-Trichloroethane	0.7032	0.8260	25.00	29.36	ug/L	17	20	0.0500	u
1,1-Dichloropropene	0.4217	0.4510	25.00	26.74	ug/L	7	20	0.0500	u
Carbon Tetrachloride	0.3483	0.3804	25.00	27.30	ug/L	9	20	0.0500	u
1,2-Dichloroethane	0.4392	0.4392	25.00	25.00	ug/L	0	20	0.0500	u
Benzene	1.3404	1.4402	25.00	26.86	ug/L	7	20	0.0500	u
Trichloroethene	0.3158	0.3674	25.00	29.09	ug/L	16	20	0.0500	u
1,2-Dichloropropane	0.3595	0.3724	25.00	25.90	ug/L	4	20	0.0500	u
Bromodichloromethane	0.3863	0.4383	25.00	28.36	ug/L	13	20	0.0500	u
Dibromomethane	0.1802	0.2007	25.00	27.85	ug/L	11	20	0.0500	u
4-Methyl-2-Pentanone	0.3044	0.2938	25.00	24.13	ug/L	-3	20	0.0500	u
cis-1,3-Dichloropropene	0.5168	0.6019	25.00	29.12	ug/L	16	20	0.0500	u
Toluene	0.9593	0.9220	25.00	24.03	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5730	0.5009	25.00	21.85	ug/L	-13	20	0.0500	u
1,1,2-Trichloroethane	0.1749	0.1656	25.00	23.67	ug/L	-5	20	0.0500	u
2-Hexanone	0.2445	0.2162	25.00	22.10	ug/L	-12	20	0.0500	u
1,3-Dichloropropane	0.6133	0.5724	25.00	23.33	ug/L	-7	20	0.0500	u
Tetrachloroethene	0.3329	0.3325	25.00	24.97	ug/L	0	20	0.0500	u
Dibromochloromethane	0.3027	0.3065	25.00	25.31	ug/L	1	20	0.0500	u
1,2-Dibromoethane	0.3049	0.3007	25.00	24.66	ug/L	-1	20	0.0500	u
Chlorobenzene	1.0519	1.0074	25.00	23.94	ug/L	-4	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.3358	0.3305	25.00	24.61	ug/L	-2	20	0.0500	u
Ethylbenzene	1.8115	1.7802	25.00	24.57	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.6304	0.5962	50.00	47.29	ug/L	-5	20	0.0500	u
o-Xylene	0.6283	0.5783	25.00	23.01	ug/L	-8	20	0.0500	u
Styrene	1.0367	0.9961	25.00	24.02	ug/L	-4	20	0.0500	u
Bromoform	0.1849	0.1969	25.00	23.05	ug/L	-8	20	0.1000	u
Isopropylbenzene	3.8595	3.6192	25.00	23.44	ug/L	-6	20	0.0500	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9587	0.9727	25.00	25.36	ug/L	1	20	0.3000	u
1,2,3-Trichloropropane	1.0234	1.1401	25.00	27.85	ug/L	11	20	0.0500	u
Propylbenzene	3.9448	3.5374	25.00	22.42	ug/L	-10	20	0.0500	u
Bromobenzene	1.0220	1.1748	25.00	28.74	ug/L	15	20	0.0500	u
1,3,5-Trimethylbenzene	2.7424	3.1201	25.00	28.44	ug/L	14	20	0.0500	u
2-Chlorotoluene	3.1099	3.3160	25.00	26.66	ug/L	7	20	0.0500	u
4-Chlorotoluene	2.6572	2.6074	25.00	24.53	ug/L	-2	20	0.0500	u
tert-Butylbenzene	2.1712	1.7712	25.00	20.39	ug/L	-18	20	0.0500	u
1,2,4-Trimethylbenzene	2.6384	3.1389	25.00	29.74	ug/L	19	20	0.0500	u
sec-Butylbenzene	3.1284	2.5641	25.00	20.49	ug/L	-18	20	0.0500	u
para-Isopropyl Toluene	2.4941	2.5448	25.00	25.51	ug/L	2	20	0.0500	u
1,3-Dichlorobenzene	1.6902	1.6948	25.00	25.07	ug/L	0	20	0.0500	u
1,4-Dichlorobenzene	1.6542	1.5847	25.00	23.95	ug/L	-4	20	0.0500	u
n-Butylbenzene	2.4331	2.7840	25.00	36.35	ug/L	**45**	20	0.0500	c+ u ***
1,2-Dichlorobenzene	1.6119	1.6379	25.00	25.40	ug/L	2	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.1759	0.1760	25.00	25.01	ug/L	0	20	0.0500	u
1,2,4-Trichlorobenzene	1.0876	1.3136	25.00	30.19	ug/L	**21**	20	0.0500	c+ u ***
Hexachlorobutadiene	0.4373	0.4177	25.00	23.88	ug/L	-4	20	0.0500	u
Naphthalene	2.7279	3.5846	25.00	32.85	ug/L	**31**	20	0.0500	c+ u ***
1,2,3-Trichlorobenzene	1.0079	1.2748	25.00	31.62	ug/L	**26**	20	0.0500	c+ u ***
Dibromofluoromethane	0.4472	0.4591	50.00	51.33	ug/L	3	20	0.0500	u
1,2-Dichloroethane-d4	0.3737	0.3625	50.00	48.50	ug/L	-3	20	0.0500	u
Toluene-d8	1.4811	1.3247	50.00	44.72	ug/L	-11	20	0.0500	u
Bromofluorobenzene	1.2424	1.4000	50.00	56.34	ug/L	13	20	0.0500	u

ISTD (ICAL kif12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1505303	1727388	14.75	10.82	10.81	-0.01
1,4-Difluorobenzene	2446935	3007676	22.92	11.74	11.74	0.00
Chlorobenzene-d5	2136176	3083930	44.37	14.82	14.82	0.00
1,4-Dichlorobenzene-d4	983468	1072157	9.02	17.10	17.10	0.00

5% spike rule

Analyst: BO Date: 10/02/09 Reviewer: LW Date: 10/06/09

+=high bias c=CCV u=use

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 469393599

Date : 09/30/09 Reference : giu14
Sequence : MSVOA07 giu Analyzed : 09/30/09 14:13

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1114691	9.90	1676421	11.04	1610987	15.17	931776	17.89
		LOWER LIMIT	557346	9.40	838211	10.54	805494	14.67	465888	17.39
		UPPER LIMIT	2229382	10.40	3352842	11.54	3221974	15.67	1863552	18.39
024	CCV		1126370	9.90	1709718	11.04	1641588	15.17	936312	17.89
025	ICV/LCS	QC514490	1130008	9.90	1707430	11.04	1634797	15.17	929042	17.89
027	BLANK	QC514489	1105400	9.90	1676270	11.04	1598651	15.17	900780	17.89
028	SAMPLE	215071-001	1052752	9.90	1604924	11.04	1530307	15.17	854366	17.89
029	SAMPLE	215071-010	1059707	9.90	1611686	11.04	1538196	15.17	865014	17.89
030	SAMPLE	215010-010	1046717	9.90	1589716	11.04	1525513	15.17	856688	17.89
031	SAMPLE	215072-012	1028436	9.90	1574597	11.04	1509295	15.17	848868	17.89
032	SAMPLE	215071-002	1022375	9.90	1565039	11.04	1502013	15.17	842015	17.89
033	SAMPLE	215071-003	1012114	9.90	1546661	11.04	1492148	15.17	831302	17.89
034	SAMPLE	215071-004	1016587	9.90	1561740	11.04	1503566	15.17	849699	17.89
035	SAMPLE	215071-005	1088955	9.90	1665458	11.04	1590401	15.17	900318	17.89
036	SAMPLE	215071-007	1133091	9.90	1715341	11.04	1636639	15.17	923276	17.89
037	SAMPLE	215071-011	1153100	9.90	1748019	11.04	1664920	15.17	944608	17.89
038	SAMPLE	215071-012	1168227	9.90	1762272	11.04	1679601	15.17	946128	17.89
039	SAMPLE	215178-001	1243595	9.90	1876091	11.04	1787085	15.17	982493	17.89
040	SAMPLE	215178-002	1173145	9.90	1792905	11.04	1691729	15.17	934860	17.89
041	SAMPLE	215178-003	1128602	9.90	1724154	11.04	1638598	15.17	908613	17.89
042	SAMPLE	215071-006	1112178	9.90	1690821	11.04	1617442	15.17	906988	17.89
043	MSS	215071-013	1089898	9.90	1664789	11.04	1584558	15.17	889485	17.89
044	SAMPLE	215071-008	1080047	9.90	1652854	11.04	1586882	15.17	884442	17.89
045	MS	QC514491	1074134	9.90	1646885	11.04	1580510	15.17	899208	17.89
046	MSD	QC514492	1065177	9.90	1642209	11.04	1567375	15.17	889404	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 469395137

Date : 10/01/09 Reference : giu14
Sequence : MSVOA07 gj1 Analyzed : 09/30/09 14:13

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1114691	9.90	1676421	11.04	1610987	15.17	931776	17.89
		LOWER LIMIT	557346	9.40	838211	10.54	805494	14.67	465888	17.39
		UPPER LIMIT	2229382	10.40	3352842	11.54	3221974	15.67	1863552	18.39
003	CCV		1085092	9.90	1665487	11.04	1551217	15.17	861724	17.89
006	BLANK	QC514564	1057352	9.90	1616700	11.04	1499931	15.17	820140	17.89
007	SAMPLE	215064-004	1037102	9.90	1604959	11.04	1473849	15.17	802267	17.89
008	SAMPLE	215064-005	1129361	9.90	1715030	11.04	1592337	15.17	872629	17.89
009	SAMPLE	215072-007	1153934	9.90	1752987	11.04	1619329	15.17	897048	17.89
010	SAMPLE	215072-006	1157585	9.90	1744025	11.04	1618833	15.17	897037	17.89
013	CCV/BS	QC514565	1132189	9.90	1721584	11.04	1583957	15.17	866769	17.89
014	BSD	QC514566	1145226	9.90	1737553	11.04	1610223	15.17	895212	17.89
016	BLANK	QC514686	1097122	9.90	1676931	11.04	1550358	15.17	848899	17.89
017	SAMPLE	215097-002	1083024	9.90	1658319	11.04	1532686	15.17	834982	17.89
018	SAMPLE	215159-011	1053025	9.90	1616546	11.04	1503681	15.17	815300	17.89
019	SAMPLE	215071-013	1033148	9.90	1595500	11.04	1475530	15.17	797929	17.89
020	SAMPLE	215159-001	1016148	9.90	1574456	11.04	1459809	15.17	789243	17.89
021	SAMPLE	215159-002	999407	9.90	1554208	11.04	1439618	15.17	782459	17.89
022	SAMPLE	215159-003	984361	9.90	1537869	11.04	1426682	15.17	771893	17.89
023	SAMPLE	215159-005	979714	9.90	1532226	11.04	1422089	15.17	769813	17.89
024	SAMPLE	215159-006	961287	9.90	1518958	11.04	1406446	15.17	762125	17.89
025	SAMPLE	215159-007	948143	9.90	1501722	11.04	1396702	15.17	753083	17.89
026	SAMPLE	215159-008	942920	9.90	1486883	11.04	1376450	15.17	741156	17.89
027	SAMPLE	215159-010	952777	9.90	1507843	11.04	1398625	15.17	749717	17.89
028	SAMPLE	215173-001	934736	9.90	1480587	11.04	1374782	15.17	730990	17.89
029	SAMPLE	215173-002	934090	9.90	1477209	11.04	1373373	15.17	732745	17.89
030	SAMPLE	215173-003	917323	9.90	1459069	11.04	1354247	15.17	727914	17.89
031	SAMPLE	215159-004	915636	9.90	1454543	11.04	1348489	15.17	732691	17.89
032	SAMPLE	215159-009	901080	9.90	1434848	11.04	1331826	15.17	714351	17.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 499393725

Date : 09/30/09 Reference : ji818
Sequence : MSVOA10 jiu Analyzed : 09/09/09 06:08

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	520002	11.03	857205	12.19	685604	16.09	340706	18.79
		LOWER LIMIT	260001	10.53	428603	11.69	342802	15.59	170353	18.29
		UPPER LIMIT	1040004	11.53	1714410	12.69	1371208	16.59	681412	19.29
004	CCV/BS	QC514373	822307	11.00	1354780	12.16	1098588	16.07	546800	18.77
005	BSD	QC514374	828976	11.01	1350923	12.16	1081522	16.07	551652	18.78
007	BLANK	QC514372	868047	11.01	1404794	12.17	1156657	16.08	567456	18.77
008	SAMPLE	215170-001	866585	11.00	1401432	12.16	1141130	16.07	556469	18.78
009	SAMPLE	215065-007	838766	11.01	1365462	12.17	1118875	16.08	545503	18.78
010	SAMPLE	215065-010	843561	11.01	1380195	12.17	1108483	16.08	549723	18.77
011	SAMPLE	215065-008	833347	11.00	1360631	12.16	1101916	16.07	538894	18.78
012	SAMPLE	215170-002	841843	11.01	1380778	12.17	1101296	16.08	547900	18.78
013	SAMPLE	215072-002	787885	11.01	1307218	12.17	1060925	16.08	518543	18.78
014	MSS	215072-003	822398	11.00	1365647	12.16	1099665	16.07	537151	18.78
015	SAMPLE	215072-004	809628	11.02	1341442	12.17	1094653	16.08	535739	18.78
016	SAMPLE	215072-009	842645	11.01	1391887	12.17	1127317	16.08	554500	18.78
017	SAMPLE	215072-010	838374	11.02	1385983	12.18	1137324	16.08	556369	18.78
018	SAMPLE	215072-005	817694	11.02	1351646	12.18	1106521	16.09	535965	18.78
019	SAMPLE	215072-006	733368	11.03	1243149	12.19	1003455	16.10	482006	18.80
020	SAMPLE	215072-007	819077	11.02	1364189	12.18	1103553	16.08	543705	18.78
021	SAMPLE	215072-008	837936	11.02	1367912	12.18	1122281	16.08	556648	18.78
022	SAMPLE	215072-011	810275	11.02	1351365	12.18	1104732	16.09	540821	18.78
023	MS	QC514447	769107	11.02	1297965	12.18	1047434	16.08	515448	18.78
024	MSD	QC514448	843407	11.02	1359745	12.18	1092407	16.08	546184	18.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 839393591

Date : 09/30/09 Reference : kif12
Sequence : MSVOA11 kiu Analyzed : 09/15/09 13:07

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1505303	10.82	2446935	11.74	2136176	14.82	983468	17.10
		LOWER LIMIT	752652	10.32	1223468	11.24	1068088	14.32	491734	16.60
		UPPER LIMIT	3010606	11.32	4893870	12.24	4272352	15.32	1966936	17.60
011	CCV/LCS	QC514336	1727388	10.81	3007676	11.74	3083930	14.82	1072157	17.10
013	BLANK	QC514337	1616476	10.81	2902684	11.74	2965899	14.82	877907	17.10
014	SAMPLE	215010-011	1535433	10.81	2765732	11.74	2839069	14.82	833669	17.10
015	SAMPLE	215063-008	1524607	10.81	2759955	11.74	2827380	14.83	845729	17.10
016	SAMPLE	215063-009	1481004	10.81	2654320	11.74	2753660	14.83	855562	17.10
017	SAMPLE	215063-010	1438519	10.82	2598057	11.74	2681890	14.82	833617	17.10
018	SAMPLE	215030-001	1414639	10.81	2577922	11.74	2663136	14.83	792849	17.10
019	SAMPLE	215031-002	1363862	10.81	2505743	11.74	2624360	14.82	807770	17.10
020	SAMPLE	215031-001	1354832	10.81	2488331	11.74	2593576	14.82	784287	17.10
021	SAMPLE	215032-001	1337261	10.81	2471204	11.74	2584855	14.82	772916	17.10
022	SAMPLE	215010-009	1294835	10.81	2386534	11.74	2519583	14.82	805600	17.10
023	SAMPLE	215031-001	1312140	10.81	2406978	11.74	2543996	14.82	793702	17.10
024	SAMPLE	215072-001	1275963	10.81	2368883	11.74	2492201	14.82	786162	17.10
025	SAMPLE	215064-001	1276629	10.81	2353291	11.74	2516479	14.82	810167	17.10
026	SAMPLE	215064-002	1292449	10.82	2385988	11.74	2536468	14.83	756692	17.10
027	SAMPLE	215064-003	1289627	10.82	2381981	11.74	2508312	14.82	778745	17.10
028	SAMPLE	215064-004	1262016	10.81	2327612	11.74	2507022	14.82	804619	17.10
029	MSS	215064-005	1462134	10.81	2629954	11.74	2846614	14.82	931779	17.10
030	SAMPLE	215064-006	1738074	10.81	3083472	11.74	3251245	14.83	1059152	17.10
031	SAMPLE	215064-007	1723707	10.81	3062601	11.74	3216630	14.83	981260	17.10
032	SAMPLE	215064-008	1657110	10.82	2947441	11.74	3096470	14.83	966559	17.10
033	SAMPLE	215064-009	1558594	10.81	2788777	11.74	2939638	14.82	870385	17.10
034	MS	QC514399	1538208	10.81	2781765	11.74	2939831	14.82	1086195	17.10
035	MSD	QC514400	1700259	10.81	3011334	11.74	3243805	14.82	1275926	17.10
040	SAMPLE	215294-004	1507277	10.81	2716318	11.74	2845909	14.82	908841	17.10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469393599

Instrument : MSVOA07 Begun : 09/30/09 07:59
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	giu01	X	IB			09/30/09 07:59	1.0	1	
002	giu02	X	IB			09/30/09 08:36	1.0	1	
003	giu03	X	IB			09/30/09 09:07	1.0	1	
004	giu04	X	BFB			09/30/09 09:55	1.0	2	
005	giu05	X	BFB			09/30/09 10:09	1.0	2	
006	giu06	TUN	BFB			09/30/09 10:27	1.0	2	
007	giu07	IB	CALIB IB			09/30/09 10:39	1.0	1	
008	giu08	ICAL	.25/.5PPB			09/30/09 11:10	1.0	3 4 5 6 1	
009	giu09	ICAL	0.5/1PPB			09/30/09 11:40	1.0	3 4 5 6 1	
010	giu10	ICAL	2PPB			09/30/09 12:11	1.0	3 4 5 6 1	
011	giu11	ICAL	5PPB			09/30/09 12:41	1.0	3 4 5 6 1	
012	giu12	ICAL	10PPB			09/30/09 13:12	1.0	3 4 5 6 1	
013	giu13	ICAL	20PPB			09/30/09 13:43	1.0	7 8 9 10 1	
014	giu14	ICAL	50PPB			09/30/09 14:13	1.0	7 8 9 10 1	
015	giu15	X	75PPB			09/30/09 14:44	1.0	7 8 9 10 1	
016	giu16	ICAL	100PPB			09/30/09 15:15	1.0	7 8 9 10 1	
017	giu17	X	25PPB			09/30/09 15:45	1.0	11 1	
018	giu18	X	25PPB			09/30/09 16:16	1.0	12 13 14 1	
019	giu19	X	IB			09/30/09 17:08	1.0	1	
020	giu20	ICAL	75PPB			09/30/09 17:48	1.0	7 8 9 10 1	
021	giu21	X	25PPB			09/30/09 18:31	1.0	11 1	
022	giu22	X	25PPB			09/30/09 19:02	1.0	12 15 14 1	
023	giu23	TUN	BFB			09/30/09 19:47	1.0	2	
024	giu24	CCV				09/30/09 20:13	1.0	7 8 10 9 1	
025	giu25	ICV/LCS	QC514490	Water	155514	09/30/09 20:44	1.0	12 16 15 17 1	
026	giu26	X	IB			09/30/09 21:14	1.0	1	
027	giu27	BLANK	QC514489	Water	155514	09/30/09 21:45	1.0	1	
028	giu28	SAMPLE	215071-001	Water	155514	09/30/09 22:16	1.0	1	
029	giu29	SAMPLE	215071-010	Water	155514	09/30/09 22:46	1.0	1	headspace <= 1 mL
030	giu30	SAMPLE	215010-010	Water	155514	09/30/09 23:17	1.0	1	
031	giu31	SAMPLE	215072-012	Water	155514	09/30/09 23:48	1.0	1	
032	giu32	SAMPLE	215071-002	Water	155514	10/01/09 00:18	1.0	1	
033	giu33	SAMPLE	215071-003	Water	155514	10/01/09 00:49	1.0	1	
034	giu34	SAMPLE	215071-004	Water	155514	10/01/09 01:20	1.0	1	
035	giu35	SAMPLE	215071-005	Water	155514	10/01/09 01:50	1.0	1	
036	giu36	SAMPLE	215071-007	Water	155514	10/01/09 02:21	1.0	1	headspace <= 1 mL
037	giu37	SAMPLE	215071-011	Water	155514	10/01/09 02:52	1.0	1	
038	giu38	SAMPLE	215071-012	Water	155514	10/01/09 03:22	1.0	1	
039	giu39	SAMPLE	215178-001	Water	155514	10/01/09 03:53	1.0	1	
040	giu40	SAMPLE	215178-002	Water	155514	10/01/09 04:24	1.0	1	2:ISOPROH=5300
041	giu41	SAMPLE	215178-003	Water	155514	10/01/09 04:55	1.0	1	
042	giu42	SAMPLE	215071-006	Water	155514	10/01/09 05:25	4.0	1	
043	giu43	MSS	215071-013	Water	155514	10/01/09 05:56	4.0	1	
044	giu44	SAMPLE	215071-008	Water	155514	10/01/09 06:27	50.0	1	
045	giu45	MS	QC514491	Water	155514	10/01/09 06:57	4.0	12 16 15 17 1	
046	giu46	MSD	QC514492	Water	155514	10/01/09 07:28	4.0	12 16 15 17 1	
047	giu47	X	IB			10/01/09 07:59	1.0	1	
048	giu48	X	IB			10/01/09 08:30	1.0	1	
049	giu49	X	IB			10/01/09 09:00	1.0	1	

TEW 09/30/09 : Tune was adjusted by BO prior to file giu06.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469393599

Instrument : MSVOA07 Begun : 09/30/09 07:59
Method : EPA 8260B SOP Version : TVH_8260B_rv0

TEW 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

TEW 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 23 through 49.

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S12921 2=S12404 3=S13034 4=S13036 5=S13035 6=S13033 7=S12998 8=S13032 9=S12565 10=S12929 11=S12924 12=S12996 13=S129693 14=S12845 15=S12693 16=S13055 17=S12925

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 469395137

Instrument : MSVOA07 Begun : 10/01/09 09:37
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	gj101	TUN	BFB			10/01/09 09:37	1.0	1	
002	gj102	X				10/01/09 10:03	1.0	2 3 4 5 6	
003	gj103	CCV				10/01/09 10:46	1.0	7 8 9 10 6	
004	gj104	X	QC514566	Water	155528	10/01/09 11:17	1.0	7 8 9 10 6	
005	gj105	X	IB			10/01/09 11:47	1.0	6	
006	gj106	BLANK	QC514564	Water	155528	10/01/09 12:18	1.0	6	
007	gj107	SAMPLE	215064-004	Water	155528	10/01/09 12:49	1.0	6	
008	gj108	SAMPLE	215064-005	Water	155528	10/01/09 13:19	1.0	6	
009	gj109	SAMPLE	215072-007	Water	155528	10/01/09 13:57	3.333	6	
010	gj110	SAMPLE	215072-006	Water	155528	10/01/09 14:28	5.0	6	
011	gj111	TUN	BFB			10/01/09 15:05	1.0	1	
012	gj112	X				10/01/09 15:30	1.0	2 3 4 5 6	
013	gj113	CCV/BS	QC514565	Water	155528	10/01/09 16:14	1.0	7 8 9 10 6	
014	gj114	BSD	QC514566	Water	155528	10/01/09 16:44	1.0	7 8 9 10 6	
015	gj115	X	IB			10/01/09 17:27	1.0	6	
016	gj116	BLANK	QC514686	Water	155528	10/01/09 17:58	1.0	6	
017	gj117	SAMPLE	215097-002	Water	155528	10/01/09 18:28	1.0	6	headspace <= 1 mL
018	gj118	SAMPLE	215159-011	Water	155528	10/01/09 18:59	1.0	6	
019	gj119	SAMPLE	215071-013	Water	155528	10/01/09 19:30	1.0	6	
020	gj120	SAMPLE	215159-001	Water	155528	10/01/09 20:01	1.0	6	
021	gj121	SAMPLE	215159-002	Water	155528	10/01/09 20:31	1.0	6	
022	gj122	SAMPLE	215159-003	Water	155528	10/01/09 21:02	1.0	6	
023	gj123	SAMPLE	215159-005	Water	155528	10/01/09 21:32	1.0	6	
024	gj124	SAMPLE	215159-006	Water	155528	10/01/09 22:03	1.0	6	
025	gj125	SAMPLE	215159-007	Water	155528	10/01/09 22:34	1.0	6	
026	gj126	SAMPLE	215159-008	Water	155528	10/01/09 23:05	1.0	6	
027	gj127	SAMPLE	215159-010	Water	155528	10/01/09 23:35	1.0	6	
028	gj128	SAMPLE	215173-001	Water	155528	10/02/09 00:06	1.0	6	
029	gj129	SAMPLE	215173-002	Water	155528	10/02/09 00:37	1.0	6	
030	gj130	SAMPLE	215173-003	Water	155528	10/02/09 01:07	1.0	6	
031	gj131	SAMPLE	215159-004	Water	155528	10/02/09 01:38	3.333	6	
032	gj132	SAMPLE	215159-009	Water	155528	10/02/09 02:09	5.0	6	
033	gj133	X	IB			10/02/09 02:40	1.0	6	
034	gj134	X	IB			10/02/09 03:10	1.0	6	
035	gj135	X	IB			10/02/09 03:41	1.0	6	

TEW 10/01/09 : Different aliquot of S12996 used for second set of BS/BSD.

DNT 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 35.

DNT 10/02/09 : Matrix spikes were not performed for this analysis in batch 155528 due to insufficient sample amount.

Analyst: DNT Date: 10/02/09 Reviewer: LW Date: 10/02/09

Standards used: 1=S12404 2=S12998 3=S13032 4=S12929 5=S12565 6=S12921 7=S12996 8=S13055 9=S12693 10=S12925

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499361940

Instrument : MSVOA10 Begun : 09/08/09 08:20
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji801	X	IB			09/08/09 08:20	1.0	1	
002	ji802	X	IB			09/08/09 08:54	1.0	1	
003	ji803	X	IB			09/08/09 12:48	1.0	1	
004	ji804	X	LOW PT			09/08/09 13:23	1.0	1	
005	ji805	X	IB			09/08/09 16:27	1.0	1	
006	ji806	X	LOW PT			09/08/09 17:01	1.0	1	
007	ji807	TUN	BFB			09/08/09 18:22	1.0	2	
008	ji808	TUN	BFB			09/09/09 00:19	1.0	2	
009	ji809	X	IB BAKE			09/09/09 00:42	1.0	1	
010	ji810	X	IB			09/09/09 01:33	1.0	1	
011	ji811	IB	CALIB IB			09/09/09 02:08	1.0	1	
012	ji812	ICAL	.25/0.5PPB			09/09/09 02:42	1.0	3 4 5 6 1	
013	ji813	ICAL	0.5/1PPB			09/09/09 03:16	1.0	3 4 5 6 1	
014	ji814	ICAL	2PPB			09/09/09 03:51	1.0	3 4 5 6 1	
015	ji815	ICAL	5PPB			09/09/09 04:25	1.0	3 4 5 6 1	
016	ji816	ICAL	10PPB			09/09/09 04:59	1.0	3 4 5 6 1	
017	ji817	ICAL	20PPB			09/09/09 05:34	1.0	3 4 5 6 1	
018	ji818	ICAL	50PPB			09/09/09 06:08	1.0	3 4 5 6 1	
019	ji819	ICAL	75PPB			09/09/09 06:42	1.0	3 4 5 6 1	
020	ji820	ICAL	100PPB			09/09/09 07:17	1.0	3 4 5 6 1	

BO 09/09/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

Analyst: BO Date: 09/09/09 Reviewer: LW Date: 09/10/09

Standards used: 1=S12692 2=S12404 3=S12733 4=S12773 5=S12217 6=S12685

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499363592

Instrument : MSVOA10 Begun : 09/09/09 11:52
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ji901	X	BFB			09/09/09 11:52	1.0	1	
002	ji902	X	BFB			09/09/09 12:05	1.0	1	
003	ji903	X	BFB			09/09/09 12:25	1.0	1	
004	ji904	X	BFB			09/09/09 13:31	1.0	1	
005	ji905	X	20PPB			09/09/09 14:02	1.0	2 3 4 5 6	
006	ji906	TUN	BFB			09/09/09 14:47	1.0	1	
007	ji907	CCV	20PPB			09/09/09 15:04	1.0	2 3 4 5 6	
008	ji908	ICV/BS	QC511299	Water	154716	09/09/09 16:12	1.0	7 8 9 10 6	
009	ji909	X	QC511300	Water	154716	09/09/09 16:47	1.0	7 8 9 10 6	
010	ji910	X	IB			09/09/09 17:20	1.0	6	
011	ji911	BSD	QC511300	Water	154716	09/09/09 17:55	1.0	6 7 8 9 10	
012	ji912	X	IB			09/09/09 18:28	1.0	6	
013	ji913	BLANK	QC511301	Water	154716	09/09/09 19:03	1.0	6	
014	ji914	SAMPLE	214564-003	Water	154716	09/09/09 19:37	1.0	6	
015	ji915	SAMPLE	214552-017	Water	154716	09/09/09 20:11	1.0	6	
016	ji916	SAMPLE	214664-001	Water	154716	09/09/09 20:45	1.0	6	
017	ji917	SAMPLE	214574-008	Water	154716	09/09/09 21:19	1.0	6	
018	ji918	SAMPLE	214574-007	Water	154716	09/09/09 21:53	1.0	6	
019	ji919	SAMPLE	214574-009	Water	154716	09/09/09 22:27	1.0	6	
020	ji920	SAMPLE	214574-010	Water	154716	09/09/09 23:01	1.0	6	
021	ji921	SAMPLE	214574-011	Water	154716	09/09/09 23:35	1.0	6	
022	ji922	SAMPLE	214574-001	Water	154716	09/10/09 00:09	4.0	6	
023	ji923	MSS	214574-002	Water	154716	09/10/09 00:43	14.29	6	
024	ji924	SAMPLE	214564-002	Water	154716	09/10/09 01:17	6.25	6	
025	ji925	MS	QC511345	Water	154716	09/10/09 01:51	14.29	6 7 8 9 10	
026	ji926	MSD	QC511346	Water	154716	09/10/09 02:25	14.29	6 7 8 9 10	
027	ji927	X	IB			09/10/09 02:59	1.0	6	
028	ji928	X	IB			09/10/09 03:33	1.0	6	
029	ji929	X	IB			09/10/09 04:07	1.0	6	
030	ji930	X	IB			09/10/09 04:42	1.0	6	
031	ji931	X	IB			09/10/09 05:16	1.0	6	

BO 09/09/09 : ji903, ji906, adjusted tune

HDD 09/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 31.

HDD 09/10/09 : MSS over dilute,MS/MSD not used

LW 09/11/09 : Matrix spikes QC511345,QC511346 (batch 154716) were not reported because the parent sample was reanalyzed in another batch.

Analyst: HDD Date: 09/10/09 Reviewer: LW Date: 09/11/09

Standards used: 1=S12404 2=S12733 3=S12773 4=S12217 5=S12685 6=S12692 7=S12922 8=S12589 9=S12693 10=S12845

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 499393725

Instrument : MSVOA10 Begun : 09/30/09 10:05
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jiu01	X	IB			09/30/09 10:05	1.0	1	
002	jiu02	X	BFB			09/30/09 10:43	1.0	2	
003	jiu03	TUN	BFB			09/30/09 11:08	1.0	2	
004	jiu04	CCV/BS	QC514373	Water	155479	09/30/09 11:33	1.0	3 4 5 1	
005	jiu05	BSD	QC514374	Water	155479	09/30/09 12:07	1.0	3 4 5 1	
006	jiu06	X	IB			09/30/09 12:41	1.0	1	
007	jiu07	BLANK	QC514372	Water	155479	09/30/09 13:15	1.0	1	
008	jiu08	SAMPLE	215170-001	Water	155479	09/30/09 13:49	1.0	1	
009	jiu09	SAMPLE	215065-007	Water	155479	09/30/09 14:23	2.0	1	
010	jiu10	SAMPLE	215065-010	Water	155479	09/30/09 14:57	2.0	1	
011	jiu11	SAMPLE	215065-008	Water	155479	09/30/09 15:31	3.333	1	
012	jiu12	SAMPLE	215170-002	Water	155479	09/30/09 16:05	1.0	1	
013	jiu13	SAMPLE	215072-002	Water	155479	09/30/09 16:38	1.0	1	
014	jiu14	MSS	215072-003	Water	155479	09/30/09 17:12	1.0	1	
015	jiu15	SAMPLE	215072-004	Water	155479	09/30/09 17:46	1.0	1	
016	jiu16	SAMPLE	215072-009	Water	155479	09/30/09 18:20	1.0	1	
017	jiu17	SAMPLE	215072-010	Water	155479	09/30/09 18:54	1.0	1	
018	jiu18	SAMPLE	215072-005	Water	155479	09/30/09 19:28	4.0	1	
019	jiu19	SAMPLE	215072-006	Water	155479	09/30/09 20:02	10.0	1	
020	jiu20	SAMPLE	215072-007	Water	155479	09/30/09 20:36	3.333	1	
021	jiu21	SAMPLE	215072-008	Water	155479	09/30/09 21:10	10.0	1	
022	jiu22	SAMPLE	215072-011	Water	155479	09/30/09 21:44	4.0	1	
023	jiu23	MS	QC514447	Water	155479	09/30/09 22:18	1.0	3 4 5 1	1:TCE=100
024	jiu24	MSD	QC514448	Water	155479	09/30/09 22:52	1.0	3 4 5 1	1:TCE=100
025	jiu25	X	IB			09/30/09 23:26	1.0	1	
026	jiu26	X	IB			10/01/09 00:00	1.0	1	
027	jiu27	X	IB			10/01/09 00:34	1.0	1	
028	jiu28	X	IB			10/01/09 01:08	1.0	1	
029	jiu29	X	IB			10/01/09 01:42	1.0	1	

MJD 09/30/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 12.

TEW 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 13 through 29.

Analyst: TEW Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S13008 2=S12404 3=S12922 4=S12996 5=S12693

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kif01	X	IB			09/15/09 07:39	1.0	1	
002	kif02	X	IB			09/15/09 08:25	1.0	1	
003	kif03	X	IB			09/15/09 08:53	1.0	1	
004	kif04	TUN	BFB			09/15/09 09:26	1.0	2	
005	kif05	IB	CALIB IB			09/15/09 09:49	1.0	1	
006	kif06	ICAL	.25/.5PPB			09/15/09 10:17	1.0	3 4 5 6 1	
007	kif07	ICAL	.5/1PPB			09/15/09 10:45	1.0	3 4 5 6 1	
008	kif08	X	2PPB			09/15/09 11:13	1.0	3 4 5 6 1	
009	kif09	ICAL	5PPB			09/15/09 11:42	1.0	3 4 5 6 1	
010	kif10	ICAL	10PPB			09/15/09 12:10	1.0	3 4 5 6 1	
011	kif11	ICAL	20PPB			09/15/09 12:38	1.0	7 8 9 10 1	
012	kif12	ICAL	50PPB			09/15/09 13:07	1.0	7 8 9 10 1	
013	kif13	ICAL	75PPB			09/15/09 13:35	1.0	7 8 9 10 1	
014	kif14	ICAL	100PPB			09/15/09 14:03	1.0	7 8 9 10 1	
015	kif15	X	IB			09/15/09 14:32	1.0	1	
016	kif16	X	IB			09/15/09 15:00	1.0	1	
017	kif17	X	IB			09/15/09 15:28	1.0	1	
018	kif18	ICAL	2PPB			09/15/09 15:57	1.0	3 4 5 6 1	
019	kif19	ICV/BS	QC512042	Water	154911	09/15/09 16:25	1.0	11 12 13 14 1	
020	kif20	BSD	QC512043	Water	154911	09/15/09 17:06	1.0	11 12 13 14 1	
021	kif21	TUN	BFB			09/15/09 17:35	1.0	2	
022	kif22	CCV	20PPB			09/15/09 17:49	1.0	7 8 9 10 1	
023	kif23	X	IB			09/15/09 18:26	1.0	1	
024	kif24	BLANK	QC512044	Water	154911	09/15/09 18:54	1.0	1	
025	kif25	SAMPLE	214672-006	Water	154911	09/15/09 19:22	1.0	1	headspace > 1 mL
026	kif26	SAMPLE	214672-001	Water	154911	09/15/09 19:51	1.0	1	
027	kif27	SAMPLE	214672-003	Water	154911	09/15/09 20:19	1.0	1	
028	kif28	SAMPLE	214672-002	Water	154911	09/15/09 20:47	2.0	1	
029	kif29	SAMPLE	214672-004	Water	154911	09/15/09 21:15	20.0	1	
030	kif30	X	IB			09/15/09 21:44	1.0	1	
031	kif31	SAMPLE	214843-001	Water	154911	09/15/09 22:12	1.0	1	
032	kif32	SAMPLE	214843-002	Water	154911	09/15/09 22:40	1.0	1	
033	kif33	MSS	214841-001	Water	154911	09/15/09 23:08	1.0	1	
034	kif34	SAMPLE	214841-002	Water	154911	09/15/09 23:37	1.0	1	
035	kif35	SAMPLE	214841-004	Water	154911	09/16/09 00:05	1.0	1	1:DCE12C=160
036	kif36	SAMPLE	214880-001	Water	154911	09/16/09 00:33	1.0	1	
037	kif37	SAMPLE	214896-001	Water	154911	09/16/09 01:02	1.0	1	
038	kif38	SAMPLE	214896-002	Water	154911	09/16/09 01:30	20.0	1	pH > 2
039	kif39	SAMPLE	214841-003	Water	154911	09/16/09 01:58	4.0	1	
040	kif40	SAMPLE	214841-005	Water	154911	09/16/09 02:27	3.333	1	
041	kif41	SAMPLE	214844-002	Water	154911	09/16/09 02:55	5.0	1	
042	kif42	SAMPLE	214844-003	Water	154911	09/16/09 03:23	20.0	1	
043	kif43	MS	QC512109	Water	154911	09/16/09 03:52	1.0	1 11 12 13 14	
044	kif44	MSD	QC512110	Water	154911	09/16/09 04:20	1.0	1 11 12 13 14	
045	kif45	X	IB			09/16/09 04:48	1.0	1	
046	kif46	X	IB			09/16/09 05:16	1.0	1	
047	kif47	X	IB			09/16/09 05:45	1.0	1	
048	kif48	X	IB			09/16/09 06:13	1.0	1	
049	kif49	X	IB			09/16/09 06:41	1.0	1	

BO 09/16/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 49.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839371979

Instrument : MSVOA11 Begun : 09/15/09 07:39
Method : EPA 8260B SOP Version : TVH_8260B_rv0

BO 09/16/09 : MS punctured, but not sampled. RR next sequence.

Analyst: BO Date: 09/16/09 Reviewer: LW Date: 09/16/09

Standards used: 1=S12947 2=S12404 3=S12951 4=S12913 5=S12914 6=S12952 7=S12733 8=S12773 9=S12217 10=S12634 11=S12589 12=S12845 13=S12693 14=S12922

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 839393591

Instrument : MSVOA11 Begun : 09/30/09 07:51
Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	kiu01	X	IB			09/30/09 07:51	1.0	1	
002	kiu02	X	BFB			09/30/09 08:15	1.0	2	
003	kiu03	X	QC514336	Water	155470	09/30/09 08:28	1.0	3 4 5 6 1	
004	kiu04	X	BFB			09/30/09 09:00	1.0	2	
005	kiu05	X	QC514336	Water	155470	09/30/09 09:13	1.0	3 4 5 6 1	
006	kiu06	X	BFB			09/30/09 09:49	1.0	2	
007	kiu07	X	QC514336	Water	155470	09/30/09 10:18	1.0	3 4 5 6 1	
008	kiu08	X	BFB			09/30/09 11:05	1.0	2	
009	kiu09	X	QC514336	Water	155470	09/30/09 11:17	1.0	3 4 5 6 1	
010	kiu10	TUN	BFB			09/30/09 11:44	1.0	2	
011	kiu11	CCV/LCS	QC514336	Water	155470	09/30/09 11:57	1.0	3 4 5 6 1	
012	kiu12	X	IB			09/30/09 12:25	1.0	1	
013	kiu13	BLANK	QC514337	Water	155470	09/30/09 12:54	1.0	1	
014	kiu14	SAMPLE	215010-011	Water	155470	09/30/09 13:22	1.0	1	
015	kiu15	SAMPLE	215063-008	Water	155470	09/30/09 13:50	1.0	1	
016	kiu16	SAMPLE	215063-009	Water	155470	09/30/09 14:19	1.0	1	
017	kiu17	SAMPLE	215063-010	Water	155470	09/30/09 14:47	1.0	1	
018	kiu18	SAMPLE	215030-001	Water	155470	09/30/09 15:15	1.0	1	pH > 2
019	kiu19	SAMPLE	215031-002	Water	155470	09/30/09 15:43	1.0	1	pH > 2
020	kiu20	SAMPLE	215031-001	Water	155470	09/30/09 16:12	4.0	1	pH > 2, 1:TCE=110
021	kiu21	SAMPLE	215032-001	Water	155470	09/30/09 16:40	25.0	1	pH > 2
022	kiu22	SAMPLE	215010-009	Water	155470	09/30/09 17:08	1.0	1	
023	kiu23	SAMPLE	215031-001	Water	155470	09/30/09 17:37	7.143	1	pH > 2
024	kiu24	SAMPLE	215072-001	Water	155470	09/30/09 18:05	1.0	1	headspace <= 1 mL
025	kiu25	SAMPLE	215064-001	Water	155470	09/30/09 18:33	1.0	1	
026	kiu26	SAMPLE	215064-002	Water	155470	09/30/09 19:01	1.0	1	
027	kiu27	SAMPLE	215064-003	Water	155470	09/30/09 19:30	1.0	1	
028	kiu28	SAMPLE	215064-004	Water	155470	09/30/09 19:58	1.0	1	
029	kiu29	MSS	215064-005	Water	155470	09/30/09 20:26	1.0	1	
030	kiu30	SAMPLE	215064-006	Water	155470	09/30/09 20:54	1.0	1	
031	kiu31	SAMPLE	215064-007	Water	155470	09/30/09 21:23	1.0	1	
032	kiu32	SAMPLE	215064-008	Water	155470	09/30/09 21:51	1.0	1	
033	kiu33	SAMPLE	215064-009	Water	155470	09/30/09 22:19	1.0	1	
034	kiu34	MS	QC514399	Water	155470	09/30/09 22:47	1.0	1 3 4 5 6	
035	kiu35	MSD	QC514400	Water	155470	09/30/09 23:16	1.0	1 3 4 5 6	
036	kiu36	X	IB			09/30/09 23:44	1.0	1	
037	kiu37	X	IB			10/01/09 00:12	1.0	1	
038	kiu38	X	IB			10/01/09 00:41	1.0	1	
039	kiu39	X	IB			10/01/09 01:09	1.0	1	
040	kiu40	SAMPLE	215294-004	Water	155486	10/01/09 01:37	1.0	1	

BO 09/30/09 : kiu04, kiu06, kiu08, kiu10, adjusted tune

DNT 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 40.

Analyst: DNT Date: 10/01/09 Reviewer: LW Date: 10/01/09

Standards used: 1=S12947 2=S12404 3=S12996 4=S12845 5=S12693 6=S12924

GC/MS VOLATILE ORGANICS

Batch #: 155470

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215063-8	B	<2				11	mn 1x, Acc ICV ↓	ZCè 9/30/09
2	215072-1	A	↓	Bmc			↓	TB 1mL HJ	↓
3	215064-1	↓	↓				↓	1x	
4	-2							↓	
5	-3								
6	-4								
7	-5							MSS	
8	-6								
9	-7								
10	-8								
11	-9	↓	↓						
12	-5	BCD	<2					MS/MSD	
13	215063-9*	A	↓					1x hold 9/30	
14	-10*	↓	↓					1x	
15	215030-1*	B	7					1x	↓
16	215031-1*	↓	7			4		4x	DLT 9/30/09
17	-2*		↓					1x	ZCè 9/30/09
18	215032-1*	↓	7			6		25x	DLT 9/30/09
19	215010-9	A	<2					1x	ZCè 9/30/09
20	-10	↓	—					- PUTOFF	↓
21	-11*	A	<2				↓	TB hold 9/30	
22	~~X~~								
23									
24	215294-4	A	<2				11	old TVH Blank	ZCè 9/30/09
25	215031-001	C	6			6	11	RR@7.14x >LR trichloroethene hold 9/30	DLT 9/30/09
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155479

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
told 9/30	215063-8	B						~~RR 1X ACE 1ev - w/ wt of 51 ppb~~	
2	215065-7	B	<2			3	10	RR 2x Sampler stopped	ne 9/29/09
3	-10					4		RR 2x	
4	-8	A	<2		X	6		RR 3.33x TCE >LR	9/30/09
5	215170-1							TB RUSH 10/1	MJD 9/30/09
6	-2	C						1X	
7	215072-2	A						1x HOLD 10/1	
8	3							MS1 1x	
9	3	BCD	<2					MS/MSD 1X	
10	4	A						1x	
11	5		<2			7		4x	
12	6					8		10 X	
13	7					9		3.33x	
14	8					10		10 X	
15	9							1x	
16	10								
17	11		<2			11		4x	
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS

Batch #: 155514

Water Sample Prep Sheet

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215010-10	A	<2				7	1x	TEW 9-30-09
2	215072-12				7			1x	
3	215071-1			LV	7			TB	
4	-2							1x	
5	-3								
6	-4	B							
7	-5								
8	-6	A	<2			11		4x	
9	-7			Bubble <1mL				1x	
10	-8	B				12		50x	
11	-10	A		Bubble <1mL				TB	
12	-11							1x	
13	-12								
14	-13		<2			13		4x MSS	
15	215178-1	B						1x	
16	-2								
17	-3								
18	MS/MSD	A	<2					4x	
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

GC/MS VOLATILE ORGANICS Batch #: 155528 **Water Sample Prep Sheet**

	Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	215071 ~~-8~~	~~C~~				2	7	RRe ~~20x AD~~ Report 1st run. Hold 10/2	ve 10/1/09
2	↓ -13	B	<2					↓ 1x ↓ ↓	
3	215072 -6	↓	<2			3		5x ↓ TCE @ 62PPB Hold 10/1	
4	↓ -7	↓	↓			4		↓ 3.33x hits w/ CT ↓	
5	~~215071 -7~~	—	—					~~↓ 1x Clethane hit w/ CT~~	
6	215064-4	C	<2					RRe 1x ccv↑ w/ hits Hold 10/1	
7	↓ -5	E	↓					↓ 1x ↓	
8	215159-1	D	↓					1x	
9	↓ -2	A	↓					↓	
10	-3	E	↓					↓	
11	-4	D	<2			6		3.33x	
12	-5	A	↓					1x	
13	-6	D	↓					↓	
14	-7	A	↓					↓	
15	-8	↓	↓					↓	
16	-9	E	<2			7		5x FOAM	
17	↓ -10	B	↓					1x	
18	215173-1	E	↓					↓	
19	↓ -2	↓	↓					↓	
20	↓ -3	↓	↓					↓	
21	215159-11	A	↓					↓	
22	215097-2	↓	↓	Bubble <1mL			↓	TB	↓
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Laboratory Job Number 215072

ANALYTICAL REPORT

Semivolatile Organics by GC/MS SIM

Matrix: Water

Curtis & Tompkins, Ltd.

1,4-Dioxane by 8270-SIM

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Matrix:	Water	Sampled:	09/17/09
Units:	ug/L	Received:	09/19/09
Diln Fac:	1.000	Prepared:	09/24/09
Batch#:	155279	Analyzed:	09/25/09

Field ID: ASE-72B-9C1 Lab ID: 215072-005
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	2.0	0.96	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	74	43-120	
2-Fluorobiphenyl	62	42-120	

Field ID: ASE-49B-9C1 Lab ID: 215072-010
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	0.96	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	72	43-120	
2-Fluorobiphenyl	61	42-120	

Field ID: PZ-1B-9C1 Lab ID: 215072-011
Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	18	0.95	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	69	43-120	
2-Fluorobiphenyl	56	42-120	

Type: BLANK Lab ID: QC513546

Analyte	Result	RL	ADEQ Flags
1,4-Dioxane	ND	1.0	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	78	43-120	
2-Fluorobiphenyl	69	42-120	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

1,4-Dioxane by 8270-SIM

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	371016.SH.60.61.QS	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	155279
Units:	ug/L	Prepared:	09/24/09
Diln Fac:	1.000	Analyzed:	09/25/09

Type: BS Lab ID: QC513547

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,4-Dioxane	3.000	1.861	62	59-120	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	78	43-120	
2-Fluorobiphenyl	65	42-120	

Type: BSD Lab ID: QC513548

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
1,4-Dioxane	3.000	1.893	63	59-120	2	30	

Surrogate	%REC	Limits	ADEQ Flags
Nitrobenzene-d5	84	43-120	
2-Fluorobiphenyl	71	42-120	

RPD= Relative Percent Difference

CURTIS & TOMPKINS DFTPP TUNE FOR 215072 MSSIM Water
EPA 8270C

Inst : MSBNA04 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 539304687006 File : wgu06 Time : 30-JUL-2009 18:41

Standards: S12054

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	73066	53.71	
68	< 2% of mass 69	0	0.00	
69		80410	100.00	
70	< 2% of mass 69	173	0.22	
127	40% - 60% of mass 198	67642	49.73	
197	< 1% of mass 198	0	0.00	
198		136029	100.00	
199	5% - 9% of mass 198	8747	6.43	
275	10% - 30% of mass 198	28318	20.82	
365	> 1% of mass 198	3100	2.28	
441	Present, < mass 443	11106	81.60	
442	> 40% and < 100% of mass 198	71218	52.36	
443	17% - 23% of mass 442	13611	19.11	

Analyst: TDL Date: 07/31/09 Reviewer: LW Date: 08/03/09

CURTIS & TOMPKINS DFTPP TUNE FOR 215072 MSSIM Water
EPA 8270C

Inst : MSBNA04 Run Name : DFTPP/PEM 50UG/ML IDF : 1.0
Seqnum : 539386590001 File : wip01 Time : 25-SEP-2009 11:10

Standards: S12602

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
51	30% - 60% of mass 198	68381	57.58	
68	< 2% of mass 69	372	0.51	
69		72610	100.00	
70	< 2% of mass 69	304	0.42	
127	40% - 60% of mass 198	60746	51.15	
197	< 1% of mass 198	0	0.00	
198		118749	100.00	
199	5% - 9% of mass 198	7855	6.61	
275	10% - 30% of mass 198	27482	23.14	
365	> 1% of mass 198	3926	3.31	
441	Present, < mass 443	11612	81.75	
442	> 40% and < 100% of mass 198	79818	67.22	
443	17% - 23% of mass 442	14204	17.80	

LLH 09/25/09 : Corrected automatically drawn baseline .

Analyst: LLH Date: 09/25/09 Reviewer: LW Date: 09/28/09

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 MSSIM Water: EPA 8270C-SIM

Inst : MSBNA04
Calnum : 539304687003
Units : ug/mL

Name : 4PAHSIM
Date : 30-JUL-2009 19:07
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	wgu07	539304687007	4PAHSIM	30-JUL-2009 19:07	S11712
L2	wgu08	539304687008	4PAHSIM	30-JUL-2009 19:39	S11713
L3	wgu09	539304687009	4PAHSIM	30-JUL-2009 20:11	S11714
L4	wgu10	539304687010	4PAHSIM	30-JUL-2009 20:43	S11715
L5	wgu11	539304687011	4PAHSIM	30-JUL-2009 21:15	S11716
L6	wgu12	539304687012	4PAHSIM	30-JUL-2009 21:46	S11717

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
1,4-Dioxane	0.2943m	0.3144m	0.3289m	0.3414m	0.3339m	0.3435m	AVRG		3.06689		0.3261	6	15	0.05	0.99	
Nitrobenzene-d5	0.3451	0.3496m	0.3521m	0.3566	0.3696m	0.3560	AVRG		2.81827		0.3548	2	15	0.05	0.99	
2-Fluorobiphenyl	1.3252	1.3723m	1.3746m	1.3712m	1.4079	1.4330m	AVRG		0.72427		1.3807	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
1,4-Dioxane	0.500	-10	1.000	-4	2.500	1	5.000	5	10.00	2	25.00	5
Nitrobenzene-d5	0.100	-3	0.200	-1	0.500	-1	1.000	0	2.000	4	5.000	0
2-Fluorobiphenyl	0.100	-4	0.200	-1	0.500	0	1.000	-1	2.000	2	5.000	4

TDL 08/05/09 : Manual integrations due to peak tailing and raised baselines.

Analyst: TDL Date: 08/03/09 Reviewer: LW Date: 08/06/09

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA04 Name : 4PAHSIM
Calnum : 539304687003 Cal Date : 30-JUL-2009

ICV 539304687014 (wgu14 30-JUL-2009) stds: S12219

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,4-Dioxane	10.00	11.18	ug/mL	12	20	m

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 MSSIM Water
EPA 8270C-SIM

Inst : MSBNA04 Run Name : PAHDIOX IDF : 1.0
Seqnum : 539386590002.1 File : wip02 Time : 25-SEP-2009 11:30
Cal : 539304687003 Caldate : 30-JUL-2009
Standards: S12865

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,4-Dioxane	0.3261	0.3293	5.000	5.050	ug/mL	1	20	0.0500	m
Nitrobenzene-d5	0.3548	0.3921	1.000	1.105	ug/mL	11	20	0.0500	
2-Fluorobiphenyl	1.3807	1.4056	1.000	1.018	ug/mL	2	20	0.0500	

LLH 09/25/09 : Corrected automatically drawn baseline . [general version]

Analyst: LLH Date: 09/28/09 Reviewer: LW Date: 10/01/09

m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 539386590

Date : 09/25/09
Sequence : MSBNA04 wip

Reference : wip02
Analyzed : 09/25/09 11:30

#	Type	Sample ID	DCBZ14D4	RT	NAPHD8	RT	ACEND10	RT	PHEND10	RT	CHYD12	RT	PERYD12	RT
		CCV+CCV/BS+CCV/LCS+ICV+ICV/BS+ICV/CCV+ICV/LCS STD	21716	6.98	74663	8.49	46031	10.69	76767	12.59	93529	16.00	88098	17.81
		LOWER LIMIT	10858	6.48	37332	7.99	23016	10.19	38384	12.09	46765	15.50	44049	17.31
		UPPER LIMIT	43432	7.48	149326	8.99	92062	11.19	153534	13.09	187058	16.50	176196	18.31
002	CCV	PAHDIOX	21716	6.98	74663	8.49	46031	10.69	76767	12.59	93529	16.00	88098	17.81
003	BLANK	QC513546	23692	6.99	83198	8.51	53196	10.70	89318	12.60	108284	16.01	102764	17.82
004	BS	QC513547	24638	6.98	86850	8.49	54410	10.69	90364	12.59	116150	16.00	112533	17.81
005	BSD	QC513548	30021	6.98	104486	8.49	65257	10.69	111343	12.59	141245	16.00	139709	17.81
006	SAMPLE	215022-002	32131	6.98	127103	8.50	82705	10.69	130199	12.60	181452	16.03	161911	17.84
007	SAMPLE	215022-003	39929	6.99	165990 *	8.51	87791	10.69	141803	12.60	178261	16.01	169401	17.82
008	SAMPLE	215022-004	37517	6.99	151337 *	8.51	85841	10.69	131167	12.60	169737	16.01	161815	17.82
009	SAMPLE	215022-005	29730	6.98	105105	8.49	66727	10.69	109676	12.59	132691	16.01	126727	17.82
010	SAMPLE	215022-006	30951	6.98	110346	8.49	69091	10.69	117714	12.60	147917	16.01	141306	17.82
011	SAMPLE	215022-007	37235	6.98	132803	8.49	83219	10.69	140047	12.59	176006	16.00	175541	17.81
012	SAMPLE	215022-008	34681	6.98	121278	8.49	75616	10.69	121398	12.59	157892	16.01	150446	17.81
013	SAMPLE	215022-009	36067	6.98	127756	8.49	79099	10.69	130323	12.59	164366	16.00	159408	17.81
014	SAMPLE	215022-012	36168	6.98	127160	8.49	79716	10.69	136385	12.59	170737	16.01	159000	17.82
015	SAMPLE	215036-002	34761	6.98	122748	8.49	74955	10.69	127889	12.59	157146	16.00	151021	17.81
016	SAMPLE	215072-005	35581	6.98	123235	8.49	75614	10.69	123368	12.59	156290	16.00	144834	17.81
017	SAMPLE	215072-010	31958	6.98	112421	8.49	71978	10.69	109969	12.59	145194	16.00	134313	17.81
018	SAMPLE	215072-011	33172	6.98	117528	8.49	74710	10.69	124127	12.59	162589	16.00	149279	17.81
019	SAMPLE	215022-002	28379	6.98	100299	8.49	64505	10.69	109233	12.59	139414	16.00	134239	17.82
020	SAMPLE	215022-003	29024	6.98	105144	8.49	64400	10.69	103929	12.59	129405	16.00	125831	17.81
021	SAMPLE	215022-004	31957	6.97	115444	8.49	72065	10.68	117820	12.58	138725	15.99	134130	17.80

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 539304687

Instrument : MSBNA04 Begun : 07/30/09 14:07
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	wgu01	TUN	DFTPP/PEM 50UG/ML			07/30/09 14:07	1.0	1	
002	wgu02	TUN	DFTPP/PEM 50UG/ML			07/30/09 15:25	1.0	1	
003	wgu03	TUN	DFTPP/PEM 50UG/ML			07/30/09 16:20	1.0	1	
004	wgu04	TUN	DFTPP/PEM 50UG/ML			07/30/09 17:06	1.0	1	
005	wgu05	CCV	PAHDIOX			07/30/09 18:05	1.0	2	
006	wgu06	TUN	DFTPP/PEM 50UG/ML			07/30/09 18:41	1.0	1	
007	wgu07	ICAL	4PAHSIM			07/30/09 19:07	1.0	3	
008	wgu08	ICAL	4PAHSIM			07/30/09 19:39	1.0	4	
009	wgu09	ICAL	4PAHSIM			07/30/09 20:11	1.0	5	
010	wgu10	ICAL	4PAHSIM			07/30/09 20:43	1.0	6	
011	wgu11	ICAL	4PAHSIM			07/30/09 21:15	1.0	7	
012	wgu12	ICAL	4PAHSIM			07/30/09 21:46	1.0	8	
013	wgu13	ICAL	4PAHSIM			07/30/09 22:19	1.0	9	
014	wgu14	ICV	4PAHSIM ICV			07/30/09 22:53	1.0	10	

LLH 08/03/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 014.

Standards used: 1=S12054 2=S12147 3=S11712 4=S11713 5=S11714 6=S11715 7=S11716 8=S11717 9=S11718 10=S12219

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 539386590

Instrument : MSBNA04 Begun : 09/25/09 11:10
Method : EPA 8270C, EPA 8270C-SIM SOP Version : 8270-SIM_rv0, bna_rv.9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	wip01	TUN	DFTPP/PEM 50UG/ML			09/25/09 11:10	1.0	1	
002	wip02	CCV	PAHDIOX			09/25/09 11:30	1.0	2	
003	wip03	BLANK	QC513546	Water	155279	09/25/09 12:56	1.0	3	
004	wip04	BS	QC513547	Water	155279	09/25/09 13:28	1.0	3	
005	wip05	BSD	QC513548	Water	155279	09/25/09 13:59	1.0	3	
006	wip06	SAMPLE	215022-002	Water	155279	09/25/09 14:31	1.0	3	2:NAPH=18
007	wip07	SAMPLE	215022-003	Water	155279	09/25/09 15:03	1.0	3	2:MTNPH2=35
008	wip08	SAMPLE	215022-004	Water	155279	09/25/09 15:36	1.0	3	2:MTNPH2=31
009	wip09	SAMPLE	215022-005	Water	155279	09/25/09 16:08	1.0	3	
010	wip10	SAMPLE	215022-006	Water	155279	09/25/09 16:40	1.0	3	
011	wip11	SAMPLE	215022-007	Water	155279	09/25/09 17:12	1.0	3	1:NAPH=11
012	wip12	SAMPLE	215022-008	Water	155279	09/25/09 17:43	1.0	3	
013	wip13	SAMPLE	215022-009	Water	155279	09/25/09 18:15	1.0	3	
014	wip14	SAMPLE	215022-012	Water	155279	09/25/09 18:46	1.0	3	
015	wip15	SAMPLE	215036-002	Water	155279	09/25/09 19:18	1.0	3	
016	wip16	SAMPLE	215072-005	Water	155279	09/25/09 19:50	1.0	3	
017	wip17	SAMPLE	215072-010	Water	155279	09/25/09 20:22	1.0	3	
018	wip18	SAMPLE	215072-011	Water	155279	09/25/09 20:53	1.0	3	
019	wip19	SAMPLE	215022-002	Water	155279	09/25/09 21:26	5.0	3	
020	wip20	SAMPLE	215022-003	Water	155279	09/25/09 21:57	10.0	3	1:NAPH=16
021	wip21	SAMPLE	215022-004	Water	155279	09/25/09 22:29	10.0	3	1:NAPH=15

LLH 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 021.

Standards used: 1=S12602 2=S12865 3=S12761

SAMPLE PREPARATION SUMMARY

Batch # : 155279 Analysis : 8270-SIM
Started By : CRD Prep Date : 24-SEP-2009 15:20 Finished By : SFL
Method : 3520C SOP Version : 8270_SIM_rv1 Units : mL
Spike #1 ID : S12722 Spike #2 ID : S12970

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215022-002		Water	1050	1	1	0.0009524	7	1				8270-SIM	
215022-003		Water	1060	1	1	0.0009434	7	1				8270-SIM	
215022-004		Water	1030	1	1	0.0009709	7	1				8270-SIM	
215022-005		Water	1020	1	1	0.0009804	7	1				8270-SIM	
215022-006		Water	1020	1	1	0.0009804	7	1				8270-SIM	
215022-007		Water	1020	1	1	0.0009804	7	1				8270-SIM	
215022-008		Water	1060	1	1	0.0009434	7	1				8270-SIM	
215022-009		Water	1030	1	1	0.0009709	7	1				8270-SIM	
215022-012		Water	1030	1	1	0.0009709	7	1				8270-SIM	
215036-002		Water	1060	1	1	0.0009434	7	1				8270-SIM	
215072-005		Water	1040	1	1	0.0009615	7	1				14DIOXANE	
215072-010		Water	1040	1	1	0.0009615	7	1				14DIOXANE	
215072-011		Water	1050	1	1	0.0009524	7	1				14DIOXANE	
215104-002		Water	1010	1	1	0.0009901	7	1				8270-SIM	
215104-003		Water	975	1	1	0.001026	7	1				8270-SIM	
215104-004		Water	1050	1	1	0.0009524	7	1				8270-SIM	
215138-001		Water	1000	1	1	0.001	7	1				8270-SIM	
215138-011		Water	1000	1	1	0.001	7	1				8270-SIM	
215138-012		Water	975	1	1	0.001026	7	1				8270-SIM	
QC513546	BLANK	Water	1000	1	1	0.001		1				8270-SIM	
QC513547	BS	Water	1000	1	1	0.001		1	1			8270-SIM	
QC513548	BSD	Water	1000	1	1	0.001		1	1			8270-SIM	

LLH 09/28/09 : Matrix spikes were not performed for this analysis in batch 155279 due to insufficient sample amount.

Analyst: LLH Date: 09/28/09 Reviewer: LW Date: 09/28/09

BNA (8270 & 625) Water Prep Log **Curtis & Tompkins, Ltd.**

LIMS Analysis: 8270-SIM
LIMS Batch No: 154279
Date Extracted: 9/24/09

Extraction Method:
☒ mod.EPA 3520c cont.L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
215022-002	L	1050	7	1.0		
03	K	1060				
04	J	1030				
05	K	1020				
06	G					
07	H					
08	I	1060				
09	L	1030				
1210 CRD	K					
215036-002 R1 9/24/09		1060				
215072-005	H	1040				
10						
11		1050				
215104-002	L	1010				
3		975				
4	K	1050				
215138-001	F	1000				
11						
12		975				
MB QC513546	NA	1000	NA			
LCS BS 47						
MS BSD 48						
MSD						

CRD 9/24/09

1.0 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes

	Lot# / LIMS # / Time	Date/ Initials
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	512722D	CRD 9/24/09
Cont. L/L extracted with 450mL of CH_2Cl_2	512970B	
Extraction Start Time:	FS093334	
Extraction End Time:	EM491882	
pH of all samples adjusted to pH ≥ 11 with 10 N NaOH	1530	
Extraction Start Time:	0920	SR 9/24/09
Extraction End Time:	NA	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4		
Concentrated to final volume at temperature (degrees C)	EM49007904	
Relinquished to BNA department	70°	
	✓	

9/24/09

Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

Reviewed by **Date**

Laboratory Job Number 215072

ANALYTICAL REPORT

Metals

Matrix: Water

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	215072	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-72B-9C1	Units:	ug/L
Lab ID:	215072-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Arsenic	4.1	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Barium	64	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Boron	1,400	100	1.000	155316	09/25/09	10/01/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Calcium	73,000	500	50.00	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	D1 M1 M3
Chromium	2.4	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Iron	320	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Magnesium	28,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Manganese	14	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	155369	09/28/09	09/28/09	METHOD	EPA 7470A	
Nickel	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Potassium	6,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Selenium	1.6	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Sodium	220,000	500	50.00	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	D1 M3
Thallium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	215072	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	ASE-49B-9C1	Units:	ug/L
Lab ID:	215072-010	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Arsenic	7.9	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Barium	54	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Boron	840	100	1.000	155316	09/25/09	10/01/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Calcium	43,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Chromium	1.6	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Iron	ND	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Magnesium	16,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Manganese	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	155369	09/28/09	09/28/09	METHOD	EPA 7470A	
Nickel	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Potassium	4,700	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Selenium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Sodium	190,000	500	50.00	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Zinc	ND	5.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	215072	Project#:	371016.SH.60.61.QS
Client:	CH2M Hill	Location:	Quarterly UST
Field ID:	PZ-1B-9C1	Units:	ug/L
Lab ID:	215072-011	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Antimony	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Arsenic	7.3	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Barium	45	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Beryllium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Boron	1,800	100	1.000	155316	09/25/09	10/01/09	EPA 200.8	EPA 6010B	
Cadmium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Calcium	78,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Chromium	4.0	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Iron	ND	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Lead	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Magnesium	30,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Manganese	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Mercury	ND	0.20	1.000	155369	09/28/09	09/28/09	METHOD	EPA 7470A	
Nickel	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Potassium	6,000	50	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Selenium	4.5	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Silver	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Sodium	340,000	500	50.00	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	D1
Thallium	ND	1.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	
Zinc	5.8	5.0	5.000	155316	09/25/09	09/30/09	EPA 200.8	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Type:	BLANK	Units:	ug/L
Lab ID:	QC513667	Batch#:	155316
Matrix:	Water	Prepared:	09/25/09

Analyte	Result	RL	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	09/30/09	EPA 6020	
Antimony	ND	1.0	5.000	09/30/09	EPA 6020	
Arsenic	ND	1.0	5.000	09/30/09	EPA 6020	
Barium	ND	1.0	5.000	09/30/09	EPA 6020	
Beryllium	ND	1.0	5.000	09/30/09	EPA 6020	
Boron	ND	100	1.000	10/01/09	EPA 6010B	
Cadmium	ND	1.0	5.000	09/30/09	EPA 6020	
Calcium	ND	50	5.000	09/30/09	EPA 6020	
Chromium	ND	1.0	5.000	09/30/09	EPA 6020	
Iron	ND	50	5.000	09/30/09	EPA 6020	
Lead	ND	1.0	5.000	09/30/09	EPA 6020	
Magnesium	ND	50	5.000	09/30/09	EPA 6020	
Manganese	ND	1.0	5.000	09/30/09	EPA 6020	
Nickel	ND	1.0	5.000	09/30/09	EPA 6020	
Potassium	ND	50	5.000	09/30/09	EPA 6020	
Selenium	ND	1.0	5.000	09/30/09	EPA 6020	
Silver	ND	1.0	5.000	09/30/09	EPA 6020	
Sodium	ND	50	5.000	09/30/09	EPA 6020	
Thallium	ND	1.0	5.000	09/30/09	EPA 6020	
Zinc	ND	5.0	5.000	09/30/09	EPA 6020	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Matrix:	Water	Batch#:	155316
Units:	ug/L	Prepared:	09/25/09

Type: BS Lab ID: QC513668

Analyte	Spiked	Result	%REC	Limits	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	10,010	100	78-120	5.000	09/30/09	EPA 6020	
Antimony	100.0	96.15	96	80-120	5.000	09/30/09	EPA 6020	
Arsenic	100.0	99.80	100	88-120	5.000	09/30/09	EPA 6020	
Barium	100.0	97.90	98	90-120	5.000	09/30/09	EPA 6020	
Beryllium	100.0	103.1	103	89-120	5.000	09/30/09	EPA 6020	
Boron	1,000	1,017	102	80-120	1.000	10/01/09	EPA 6010B	
Cadmium	100.0	99.70	100	88-120	5.000	09/30/09	EPA 6020	
Calcium	10,000	10,390	104	80-120	5.000	09/30/09	EPA 6020	
Chromium	100.0	105.4	105	90-120	5.000	09/30/09	EPA 6020	
Iron	10,000	10,130	101	89-120	5.000	09/30/09	EPA 6020	
Lead	100.0	98.30	98	89-120	5.000	09/30/09	EPA 6020	
Magnesium	10,000	9,975	100	77-120	5.000	09/30/09	EPA 6020	
Manganese	100.0	101.5	101	90-120	5.000	09/30/09	EPA 6020	
Nickel	100.0	106.6	107	89-120	5.000	09/30/09	EPA 6020	
Potassium	10,000	10,080	101	80-120	5.000	09/30/09	EPA 6020	
Selenium	100.0	104.6	105	90-120	5.000	09/30/09	EPA 6020	
Silver	100.0	92.25	92	86-120	5.000	09/30/09	EPA 6020	
Sodium	10,000	9,770	98	80-120	5.000	09/30/09	EPA 6020	
Thallium	50.00	49.26	99	80-120	5.000	09/30/09	EPA 6020	
Zinc	100.0	104.6	105	79-120	5.000	09/30/09	EPA 6020	

Type: BSD Lab ID: QC513669

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	9,880	99	78-120	1	20	5.000	09/30/09	EPA 6020	
Antimony	100.0	94.35	94	80-120	2	20	5.000	09/30/09	EPA 6020	
Arsenic	100.0	98.20	98	88-120	2	20	5.000	09/30/09	EPA 6020	
Barium	100.0	96.30	96	90-120	2	20	5.000	09/30/09	EPA 6020	
Beryllium	100.0	99.40	99	89-120	4	20	5.000	09/30/09	EPA 6020	
Boron	1,000	1,029	103	80-120	1	20	1.000	10/01/09	EPA 6010B	
Cadmium	100.0	98.35	98	88-120	1	20	5.000	09/30/09	EPA 6020	
Calcium	10,000	10,220	102	80-120	2	20	5.000	09/30/09	EPA 6020	
Chromium	100.0	102.4	102	90-120	3	20	5.000	09/30/09	EPA 6020	
Iron	10,000	10,170	102	89-120	0	20	5.000	09/30/09	EPA 6020	
Lead	100.0	96.90	97	89-120	1	20	5.000	09/30/09	EPA 6020	
Magnesium	10,000	9,840	98	77-120	1	20	5.000	09/30/09	EPA 6020	
Manganese	100.0	99.80	100	90-120	2	20	5.000	09/30/09	EPA 6020	
Nickel	100.0	104.6	105	89-120	2	20	5.000	09/30/09	EPA 6020	
Potassium	10,000	9,945	99	80-120	1	20	5.000	09/30/09	EPA 6020	
Selenium	100.0	101.8	102	90-120	3	20	5.000	09/30/09	EPA 6020	
Silver	100.0	90.55	91	86-120	2	20	5.000	09/30/09	EPA 6020	
Sodium	10,000	9,705	97	80-120	1	20	5.000	09/30/09	EPA 6020	
Thallium	50.00	48.41	97	80-120	2	20	5.000	09/30/09	EPA 6020	
Zinc	100.0	103.5	103	79-120	1	20	5.000	09/30/09	EPA 6020	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Field ID:	ASE-72B-9C1	Batch#:	155316
MSS Lab ID:	215072-005	Sampled:	09/17/09
Matrix:	Water	Received:	09/19/09
Units:	ug/L	Prepared:	09/25/09

Type: MS Lab ID: QC513670

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	29.41	10,000	9,805	98	75-120	5.000	09/30/09	EPA 6020	
Antimony	<0.09911	100.0	95.60	96	76-120	5.000	09/30/09	EPA 6020	
Arsenic	4.136	100.0	102.5	98	84-124	5.000	09/30/09	EPA 6020	
Barium	64.40	100.0	159.1	95	85-120	5.000	09/30/09	EPA 6020	
Beryllium	<0.1188	100.0	98.85	99	79-121	5.000	09/30/09	EPA 6020	
Boron	1,419	1,000	2,386	97	77-122	1.000	10/01/09	EPA 6010B	
Cadmium	<0.08328	100.0	97.45	97	82-120	5.000	09/30/09	EPA 6020	
Calcium	72,750	10,000	87,200	145 NM	69-123	5.000	09/30/09	EPA 6020	M1 M3
Chromium	2.395	100.0	106.5	104	73-135	5.000	09/30/09	EPA 6020	
Iron	319.7	10,000	10,360	100	52-155	5.000	09/30/09	EPA 6020	
Lead	<0.1461	100.0	94.15	94	89-121	5.000	09/30/09	EPA 6020	
Magnesium	28,350	10,000	38,100	98	66-123	5.000	09/30/09	EPA 6020	
Manganese	14.02	100.0	115.2	101	79-121	5.000	09/30/09	EPA 6020	
Nickel	0.8325	100.0	103.6	103	84-120	5.000	09/30/09	EPA 6020	
Potassium	5,960	10,000	15,840	99	76-120	5.000	09/30/09	EPA 6020	
Selenium	1.554	100.0	101.4	100	71-140	5.000	09/30/09	EPA 6020	
Silver	<0.06798	100.0	88.55	89	75-141	5.000	09/30/09	EPA 6020	
Sodium	221,100	10,000	227,200	61 NM	61-128	50.00	09/30/09	EPA 6020	D1 M3
Thallium	<0.02757	50.00	49.13	98	70-120	5.000	09/30/09	EPA 6020	
Zinc	4.339	100.0	102.0	98	61-124	5.000	09/30/09	EPA 6020	

Type: MSD Lab ID: QC513671

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	9,885	99	75-120	1	20	5.000	09/30/09	EPA 6020	
Antimony	100.0	95.55	96	76-120	0	20	5.000	09/30/09	EPA 6020	
Arsenic	100.0	103.4	99	84-124	1	20	5.000	09/30/09	EPA 6020	
Barium	100.0	159.7	95	85-120	0	20	5.000	09/30/09	EPA 6020	
Beryllium	100.0	99.45	99	79-121	1	20	5.000	09/30/09	EPA 6020	
Boron	1,000	2,403	98	77-122	1	20	1.000	10/01/09	EPA 6010B	
Cadmium	100.0	96.85	97	82-120	1	20	5.000	09/30/09	EPA 6020	
Calcium	10,000	87,550	148 NM	69-123	0	24	5.000	09/30/09	EPA 6020	M1 M3
Chromium	100.0	104.8	102	73-135	2	20	5.000	09/30/09	EPA 6020	
Iron	10,000	10,320	100	52-155	0	20	5.000	09/30/09	EPA 6020	
Lead	100.0	94.75	95	89-121	1	20	5.000	09/30/09	EPA 6020	
Magnesium	10,000	38,380	100	66-123	1	20	5.000	09/30/09	EPA 6020	
Manganese	100.0	112.9	99	79-121	2	20	5.000	09/30/09	EPA 6020	
Nickel	100.0	102.8	102	84-120	1	20	5.000	09/30/09	EPA 6020	
Potassium	10,000	15,850	99	76-120	0	20	5.000	09/30/09	EPA 6020	
Selenium	100.0	102.9	101	71-140	1	20	5.000	09/30/09	EPA 6020	
Silver	100.0	89.10	89	75-141	1	20	5.000	09/30/09	EPA 6020	
Sodium	10,000	228,100	70 NM	61-128	0	20	50.00	09/30/09	EPA 6020	D1 M3
Thallium	50.00	48.68	97	70-120	1	20	5.000	09/30/09	EPA 6020	
Zinc	100.0	102.0	98	61-124	0	30	5.000	09/30/09	EPA 6020	

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Field ID:	ASE-72B-9C1	Units:	ug/L
Type:	Post Digest Spike	Batch#:	155316
MSS Lab ID:	215072-005	Sampled:	09/17/09
Lab ID:	QC513672	Received:	09/19/09
Matrix:	Water		

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	29.41	50,000	47,020	94	75-125	5.000	09/30/09	EPA 6020	
Antimony	<0.09911	500.0	491.6	98	75-125	5.000	09/30/09	EPA 6020	
Arsenic	4.136	500.0	483.9	96	75-125	5.000	09/30/09	EPA 6020	
Barium	64.40	500.0	516.5	90	75-125	5.000	09/30/09	EPA 6020	
Beryllium	<0.1188	500.0	488.0	98	75-125	5.000	09/30/09	EPA 6020	
Boron	1,419	1,000	2,432	101	75-125	1.000	10/01/09	EPA 6010B	
Cadmium	<0.08328	500.0	464.3	93	75-125	5.000	09/30/09	EPA 6020	
Calcium	72,750	500,000	533,000	92	75-125	50.00	09/30/09	EPA 6020	D2
Chromium	2.395	500.0	492.3	98	75-125	5.000	09/30/09	EPA 6020	
Iron	319.7	50,000	48,230	96	75-125	5.000	09/30/09	EPA 6020	
Lead	<0.1461	500.0	464.6	93	75-125	5.000	09/30/09	EPA 6020	
Magnesium	28,350	50,000	74,500	92	75-125	5.000	09/30/09	EPA 6020	
Manganese	14.02	500.0	486.5	94	75-125	5.000	09/30/09	EPA 6020	
Nickel	0.8325	500.0	490.9	98	75-125	5.000	09/30/09	EPA 6020	
Potassium	5,960	50,000	53,150	94	75-125	5.000	09/30/09	EPA 6020	
Selenium	1.554	500.0	481.5	96	75-125	5.000	09/30/09	EPA 6020	
Silver	<0.06798	500.0	478.8	96	75-125	5.000	09/30/09	EPA 6020	
Sodium	221,100	500,000	647,500	85	75-125	50.00	09/30/09	EPA 6020	D2
Thallium	<0.02757	250.0	246.7	99	75-125	5.000	09/30/09	EPA 6020	
Zinc	4.339	500.0	468.9	93	75-125	5.000	09/30/09	EPA 6020	

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 200.8
Project#:	371016.SH.60.61.QS		
Field ID:	ASE-72B-9C1	Units:	ug/L
Type:	Serial Dilution	Batch#:	155316
MSS Lab ID:	215072-005	Sampled:	09/17/09
Lab ID:	QC513673	Received:	09/19/09
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	29.41	50.00	150.5 J	250.0	NC	10	25.00	09/30/09	EPA 6020	E4
Antimony	ND	1.000	ND	2.500	NC	10	25.00	09/30/09	EPA 6020	
Arsenic	4.136	1.000	3.943	2.500	NC	10	25.00	09/30/09	EPA 6020	
Barium	64.40	1.000	64.73	2.500	1	10	25.00	09/30/09	EPA 6020	
Beryllium	ND	1.000	ND	2.500	NC	10	25.00	09/30/09	EPA 6020	
Boron	1,419	100.0	1,353	500.0	5	10	5.000	10/01/09	EPA 6010B	
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	09/30/09	EPA 6020	
Calcium	72,750	500.0	68,050	2,500	6	10	250.0	09/30/09	EPA 6020	
Chromium	2.395	1.000	3.053	2.500	NC	10	25.00	10/01/09	EPA 6020	
Iron	319.7	50.00	350.0	250.0	9	10	25.00	09/30/09	EPA 6020	
Lead	ND	1.000	ND	2.500	NC	10	25.00	09/30/09	EPA 6020	
Magnesium	28,350	50.00	28,800	250.0	2	10	25.00	09/30/09	EPA 6020	
Manganese	14.02	1.000	15.49	2.500	11 *	10	25.00	09/30/09	EPA 6020	
Nickel	0.8325	1.000	1.150 J	2.500	NC	10	25.00	09/30/09	EPA 6020	E4
Potassium	5,960	50.00	6,145	250.0	3	10	25.00	09/30/09	EPA 6020	
Selenium	1.554	1.000	1.648 J	2.500	NC	10	25.00	09/30/09	EPA 6020	E4
Silver	ND	1.000	ND	2.500	NC	10	25.00	09/30/09	EPA 6020	
Sodium	221,100	500.0	223,200	2,500	1	10	250.0	09/30/09	EPA 6020	
Thallium	ND	1.000	ND	1.250	NC	10	25.00	09/30/09	EPA 6020	
Zinc	4.339	5.000	8.050 J	16.27	NC	10	25.00	09/30/09	EPA 6020	E4

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	155369
Lab ID:	QC513911	Prepared:	09/28/09
Matrix:	Water	Analyzed:	09/28/09
Units:	ug/L		

Result	RL	ADEQ Flags
ND	0.20	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	155369
Matrix:	Water	Prepared:	09/28/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC513912	2.500	2.480	99	80-120			
BSD	QC513913	2.500	2.510	100	80-120	1	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	155369
Field ID:	ASE-72B-9C1	Sampled:	09/17/09
MSS Lab ID:	215072-005	Received:	09/19/09
Matrix:	Water	Prepared:	09/28/09
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC513914	<0.03335	2.500	2.930	117	80-120			
MSD	QC513915		2.500	2.940	118	80-120	0	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ASE-72B-9C1	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	155369
MSS Lab ID:	215072-005	Sampled:	09/17/09
Lab ID:	QC513916	Received:	09/19/09
Matrix:	Water	Analyzed:	09/28/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
ND	0.2000	ND	1.000	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

REPORTING SUMMARY FOR 215072 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALK	SBS	ASA	BBE	BCD	CCA	CCR	FEB	PBG	MGN	MGN	HGI	NKI	SE	AG	NA	TL	ZN
215072-005	MET14	09/28/09 13:54	1.0												+						
215072-005	MET26	09/30/09 03:12	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
215072-005	MET16	09/30/09 22:31	50.0						+										+		
215072-005	MET09	10/01/09 15:02	1.0					+													
215072-010	MET14	09/28/09 14:03	1.0												+						
215072-010	MET26	09/30/09 04:32	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
215072-010	MET16	09/30/09 23:24	50.0																+		
215072-010	MET09	10/01/09 15:47	1.0					+													
215072-011	MET14	09/28/09 14:05	1.0												+						
215072-011	MET26	09/30/09 04:43	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
215072-011	MET16	09/30/09 23:35	50.0																+		
215072-011	MET09	10/01/09 15:55	1.0					+													
QC513667	MET26	09/30/09 02:00	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
QC513667	MET16	09/30/09 22:00	5.0						+										+		
QC513667	MET09	10/01/09 14:47	1.0					+													
QC513668	MET26	09/30/09 02:10	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
QC513668	MET16	09/30/09 22:10	5.0																+		
QC513668	MET09	10/01/09 14:53	1.0					+													
QC513669	MET26	09/30/09 03:01	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
QC513669	MET16	09/30/09 22:21	5.0																+		
QC513669	MET09	10/01/09 14:58	1.0					+													
QC513670	MET26	09/30/09 03:32	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
QC513670	MET16	09/30/09 22:53	50.0																+		
QC513670	MET09	10/01/09 15:10	1.0					+													
QC513671	MET26	09/30/09 03:42	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
QC513671	MET16	09/30/09 23:03	50.0																+		
QC513671	MET09	10/01/09 15:17	1.0					+													
QC513672	MET26	09/30/09 03:52	5.0	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+
QC513672	MET16	09/30/09 23:14	50.0						+										+		
QC513672	MET09	10/01/09 15:29	1.0					+													
QC513673	MET26	09/30/09 03:22	25.0	+	+	+	+	+		+		+	+	+		+	+	+	+	+	+
QC513673	MET16	09/30/09 22:42	250.0						+										+		
QC513673	MET26	10/01/09 15:04	25.0							+											
QC513673	MET09	10/01/09 15:23	5.0					+													
QC513911	MET14	09/28/09 13:44	1.0												+						
QC513912	MET14	09/28/09 13:46	1.0												+						
QC513913	MET14	09/28/09 13:52	1.0												+						
QC513914	MET14	09/28/09 13:56	1.0												+						
QC513915	MET14	09/28/09 13:59	1.0												+						

REPORTING SUMMARY FOR 215072 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALBS	ASAE	BBCD	CACR	FEBG	MGNG	HGI	NKEG	SAAL	TZN
QC513916	MET14	09/28/09 14:01	5.0							+			

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019392432

Instrument : MET26 Begun : 09/29/09 12:32
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i29m00001	TUN				09/29/09 12:32	1.0	1	
002	09i29m00002	X	RINSE			09/29/09 12:39	1.0	2	
003	09i29m00003	ICALBLK	CALBLANK			09/29/09 12:49	1.0	2	
004	09i29m00004	ICAL				09/29/09 12:59	1.0	3 2	
005	09i29m00005	ICAL				09/29/09 13:10	1.0	4 2	
006	09i29m00006	ICAL				09/29/09 13:20	1.0	5 2	
007	09i29m00007	ICAL				09/29/09 13:30	1.0	6 2	
008	09i29m00008	ICAL				09/29/09 13:40	1.0	7 2	
009	09i29m00009	X				09/29/09 13:50	1.0	8 2	
010	09i29m00010	X				09/29/09 14:00	1.0	9 2	
011	09i29m00011	ICAL				09/29/09 14:09	1.0	8 2	
012	09i29m00012	X				09/29/09 14:19	1.0	9 2	
013	09i29m00013	X				09/29/09 14:39	1.0	9 2	
014	09i29m00014	X				09/29/09 14:49	1.0	2	
015	09i29m00015	ICV				09/29/09 14:58	1.0	9 2	
016	09i29m00016	ICB				09/29/09 15:07	1.0	2	
017	09i29m00017	X				09/29/09 15:18	1.0	2	
018	09i29m00018	ICSA				09/29/09 15:25	1.0	10 2	7:CA=330000
019	09i29m00019	ICSAB				09/29/09 15:36	1.0	11 2	11:CA=310000
020	09i29m00020	X	RINSE			09/29/09 15:46	1.0	2	
021	09i29m00021	X	RINSE			09/29/09 15:56	1.0	2	
022	09i29m00022	SAMPLE	215106-002	Filtrate	155368	09/29/09 16:06	5.0	2	1:NA=37000
023	09i29m00023	SAMPLE	215106-003	Filtrate	155368	09/29/09 16:16	5.0	2	1:NA=48000
024	09i29m00024	SAMPLE	215106-004	Filtrate	155368	09/29/09 16:27	5.0	2	1:NA=27000
025	09i29m00025	SAMPLE	215106-005	Filtrate	155368	09/29/09 16:37	5.0	2	1:NA=23000
026	09i29m00026	SAMPLE	215106-006	Filtrate	155368	09/29/09 16:47	5.0	2	
027	09i29m00027	SAMPLE	215106-007	Filtrate	155368	09/29/09 16:57	5.0	2	2:NA=30000
028	09i29m00028	SAMPLE	215106-008	Filtrate	155368	09/29/09 17:07	5.0	2	1:MN=900
029	09i29m00029	SAMPLE	215106-009	Filtrate	155368	09/29/09 17:17	5.0	2	1:MN=950
030	09i29m00030	CCV				09/29/09 17:27	1.0	12 2	
031	09i29m00031	CCB				09/29/09 17:37	1.0	2	
032	09i29m00032	X				09/29/09 17:47	1.0	2	
033	09i29m00033	SAMPLE	215106-011	Filtrate	155368	09/29/09 17:58	5.0	2	1:NA=24000
034	09i29m00034	SAMPLE	215106-012	Filtrate	155368	09/29/09 18:08	5.0	2	
035	09i29m00035	CCV				09/29/09 18:18	1.0	12 2	
036	09i29m00036	CCB				09/29/09 18:28	1.0	2	
037	09i29m00037	BLANK	QC513899	Filtrate	155367	09/29/09 18:38	5.0	2	
038	09i29m00038	BS	QC513900	Filtrate	155367	09/29/09 18:48	5.0	2	
039	09i29m00039	BSD	QC513901	Filtrate	155367	09/29/09 18:58	5.0	2	
040	09i29m00040	MSS	215104-002	Filtrate	155367	09/29/09 19:08	5.0	2	3:NA=1700000
041	09i29m00041	SER	QC513904	Filtrate	155367	09/29/09 19:18	25.0	2	
042	09i29m00042	MS	QC513902	Filtrate	155367	09/29/09 19:29	5.0	2	
043	09i29m00043	MSD	QC513903	Filtrate	155367	09/29/09 19:39	5.0	2	
044	09i29m00044	PDS	QC513905	Filtrate	155367	09/29/09 19:49	5.0	13 14 2	
045	09i29m00045	SAMPLE	215104-003	Filtrate	155367	09/29/09 19:58	5.0	2	3:NA=1700000
046	09i29m00046	SAMPLE	215104-004	Filtrate	155367	09/29/09 20:08	5.0	2	1:NA=130000
047	09i29m00047	CCV				09/29/09 20:19	1.0	12 2	
048	09i29m00048	CCB				09/29/09 20:28	1.0	2	
049	09i29m00049	X				09/29/09 20:39	1.0	2	
050	09i29m00050	BLANK	QC513874	Water	155362	09/29/09 20:49	5.0	2	
051	09i29m00051	BS	QC513875	Water	155362	09/29/09 20:59	5.0	2	
052	09i29m00052	BSD	QC513876	Water	155362	09/29/09 21:09	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019392432

Instrument : MET26 Begun : 09/29/09 12:32
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i29m00053	MSS	215166-001	Water	155362	09/29/09 21:19	5.0	2	1:NA=71000
054	09i29m00054	MS	QC513877	Water	155362	09/29/09 21:29	5.0	2	1:NA=72000
055	09i29m00055	MSD	QC513878	Water	155362	09/29/09 21:39	5.0	2	
056	09i29m00056	SAMPLE	215166-002	Water	155362	09/29/09 21:49	5.0	2	1:NA=35000
057	09i29m00057	SAMPLE	215166-003	Water	155362	09/29/09 21:59	5.0	2	1:NA=37000
058	09i29m00058	SAMPLE	215166-004	Water	155362	09/29/09 22:10	5.0	2	1:NA=38000
059	09i29m00059	SAMPLE	215166-005	Water	155362	09/29/09 22:20	5.0	2	1:NA=37000
060	09i29m00060	CCV				09/29/09 22:30	1.0	12 2	
061	09i29m00061	CCB				09/29/09 22:40	1.0	2	
062	09i29m00062	X				09/29/09 22:50	1.0	2	
063	09i29m00063	SAMPLE	215166-006	Water	155362	09/29/09 23:00	5.0	2	1:NA=68000
064	09i29m00064	TUN				09/29/09 23:11	1.0	1	
065	09i29m00065	X	RINSE			09/29/09 23:18	1.0	2	
066	09i29m00066	SAMPLE	215166-007	Water	155362	09/29/09 23:28	5.0	2	1:NA=53000
067	09i29m00067	SAMPLE	215166-008	Water	155362	09/29/09 23:38	5.0	2	1:NA=29000
068	09i29m00068	SAMPLE	215166-009	Water	155362	09/29/09 23:48	5.0	2	1:NA=31000
069	09i29m00069	SAMPLE	215166-010	Water	155362	09/29/09 23:59	5.0	2	
070	09i29m00070	SAMPLE	215166-011	Water	155362	09/30/09 00:09	5.0	2	3:NA=56000
071	09i29m00071	SAMPLE	215166-012	Water	155362	09/30/09 00:19	5.0	2	2:NA=41000
072	09i29m00072	SAMPLE	215166-013	Water	155362	09/30/09 00:29	5.0	2	1:NA=53000
073	09i29m00073	SAMPLE	215166-014	Water	155362	09/30/09 00:39	5.0	2	1:NA=31000
074	09i29m00074	SAMPLE	215166-015	Water	155362	09/30/09 00:49	5.0	2	1:NA=43000
075	09i29m00075	CCV				09/30/09 00:59	1.0	12 2	
076	09i29m00076	X				09/30/09 01:09	1.0	2	
077	09i29m00077	CCB				09/30/09 01:20	1.0	2	
078	09i29m00078	SAMPLE	215166-016	Water	155362	09/30/09 01:30	5.0	2	
079	09i29m00079	CCV				09/30/09 01:40	1.0	12 2	
080	09i29m00080	CCB				09/30/09 01:50	1.0	2	
081	09i29m00081	BLANK	QC513667	Water	155316	09/30/09 02:00	5.0	2	
082	09i29m00082	BS	QC513668	Water	155316	09/30/09 02:10	5.0	2	
083	09i29m00083	ICSA				09/30/09 02:20	1.0	10 2	7:CA=330000
084	09i29m00084	ICSAB				09/30/09 02:31	1.0	11 2	12:CA=300000
085	09i29m00085	X	RINSE			09/30/09 02:41	1.0	2	
086	09i29m00086	X	RINSE			09/30/09 02:51	1.0	2	
087	09i29m00087	BSD	QC513669	Water	155316	09/30/09 03:01	5.0	2	
088	09i29m00088	MSS	215072-005	Water	155316	09/30/09 03:12	5.0	2	1:NA=46000
089	09i29m00089	SER	QC513673	Water	155316	09/30/09 03:22	25.0	2	
090	09i29m00090	MS	QC513670	Water	155316	09/30/09 03:32	5.0	2	1:NA=49000
091	09i29m00091	MSD	QC513671	Water	155316	09/30/09 03:42	5.0	2	1:NA=48000
092	09i29m00092	PDS	QC513672	Water	155316	09/30/09 03:52	5.0	13 14 2	1:NA=55000
093	09i29m00093	CCV				09/30/09 04:02	1.0	12 2	
094	09i29m00094	X				09/30/09 04:12	1.0	2	
095	09i29m00095	CCB				09/30/09 04:22	1.0	2	
096	09i29m00096	SAMPLE	215072-010	Water	155316	09/30/09 04:32	5.0	2	1:NA=40000
097	09i29m00097	SAMPLE	215072-011	Water	155316	09/30/09 04:43	5.0	2	1:NA=65000
098	09i29m00098	BLANK	QC513991	Filtrate	155388	09/30/09 04:53	5.0	2	
099	09i29m00099	BS	QC513992	Filtrate	155388	09/30/09 05:03	5.0	2	
100	09i29m00100	BSD	QC513993	Filtrate	155388	09/30/09 05:13	5.0	2	
101	09i29m00101	MSS	214996-001	Filtrate	155388	09/30/09 05:23	5.0	2	1:NA=34000
102	09i29m00102	SER	QC513996	Filtrate	155388	09/30/09 05:34	25.0	2	
103	09i29m00103	MS	QC513994	Filtrate	155388	09/30/09 05:44	5.0	2	
104	09i29m00104	MSD	QC513995	Filtrate	155388	09/30/09 05:54	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019392432

Instrument : MET26 Begun : 09/29/09 12:32
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09i29m00105	PDS	QC513997	Filtrate	155388	09/30/09 06:04	5.0	13 14 2	
106	09i29m00106	CCV				09/30/09 06:14	1.0	12 2	
107	09i29m00107	X				09/30/09 06:24	1.0	2	
108	09i29m00108	CCB				09/30/09 06:34	1.0	2	
109	09i29m00109	SAMPLE	214997-001	Filtrate	155388	09/30/09 06:45	5.0	2	1:NA=110000
110	09i29m00110	SAMPLE	214997-003	Filtrate	155388	09/30/09 06:55	5.0	2	1:NA=170000
111	09i29m00111	SAMPLE	214997-004	Filtrate	155388	09/30/09 07:05	5.0	2	1:NA=110000
112	09i29m00112	SAMPLE	215166-001	Filtrate	155388	09/30/09 07:15	5.0	2	1:NA=65000
113	09i29m00113	SAMPLE	215166-002	Filtrate	155388	09/30/09 07:25	5.0	2	1:NA=34000
114	09i29m00114	SAMPLE	215166-003	Filtrate	155388	09/30/09 07:36	5.0	2	1:NA=36000
115	09i29m00115	SAMPLE	215166-004	Filtrate	155388	09/30/09 07:46	5.0	2	1:NA=36000
116	09i29m00116	SAMPLE	215166-005	Filtrate	155388	09/30/09 07:56	5.0	2	1:NA=35000
117	09i29m00117	SAMPLE	215166-006	Filtrate	155388	09/30/09 08:06	5.0	2	1:NA=63000
118	09i29m00118	SAMPLE	215166-007	Filtrate	155388	09/30/09 08:17	5.0	2	1:NA=51000
119	09i29m00119	CCV				09/30/09 08:27	1.0	12 2	
120	09i29m00120	X				09/30/09 08:37	1.0	2	
121	09i29m00121	CCB				09/30/09 08:47	1.0	2	
122	09i29m00122	SAMPLE	215166-008	Filtrate	155388	09/30/09 08:57	5.0	2	1:NA=29000
123	09i29m00123	SAMPLE	215166-009	Filtrate	155388	09/30/09 09:08	5.0	2	1:NA=32000
124	09i29m00124	SAMPLE	215166-010	Filtrate	155388	09/30/09 09:18	5.0	2	
125	09i29m00125	SAMPLE	215166-011	Filtrate	155388	09/30/09 09:28	5.0	2	3:NA=56000
126	09i29m00126	SAMPLE	215166-012	Filtrate	155388	09/30/09 09:38	5.0	2	2:NA=39000
127	09i29m00127	TUN				09/30/09 09:49	1.0	1	
128	09i29m00128	X	RINSE			09/30/09 09:56	1.0	2	
129	09i29m00129	SAMPLE	215166-013	Filtrate	155388	09/30/09 10:06	5.0	2	1:NA=51000
130	09i29m00130	SAMPLE	215166-014	Filtrate	155388	09/30/09 10:17	5.0	2	1:NA=31000
131	09i29m00131	SAMPLE	215166-015	Filtrate	155388	09/30/09 10:27	5.0	2	1:NA=43000
132	09i29m00132	SAMPLE	215166-016	Filtrate	155388	09/30/09 10:37	5.0	2	
133	09i29m00133	SAMPLE	215186-016	Air	155435	09/30/09 10:47	10.0	2	
134	09i29m00134	CCV				09/30/09 10:58	1.0	12 2	
135	09i29m00135	X				09/30/09 11:08	1.0	2	
136	09i29m00136	CCB				09/30/09 11:18	1.0	2	
137	09i29m00137	BLANK	QC513899	Filtrate	155367	09/30/09 11:28	5.0	2	
138	09i29m00138	BS	QC513900	Filtrate	155367	09/30/09 11:38	5.0	2	
139	09i29m00139	BSD	QC513901	Filtrate	155367	09/30/09 11:48	5.0	2	
140	09i29m00140	MSS	215104-002	Filtrate	155367	09/30/09 11:59	5.0	2	3:NA=1800000
141	09i29m00141	SER	QC513904	Filtrate	155367	09/30/09 12:09	25.0	2	
142	09i29m00142	MS	QC513902	Filtrate	155367	09/30/09 12:19	5.0	2	
143	09i29m00143	MSD	QC513903	Filtrate	155367	09/30/09 12:29	5.0	2	
144	09i29m00144	PDS	QC513905	Filtrate	155367	09/30/09 12:39	5.0	13 14 2	
145	09i29m00145	SAMPLE	215104-003	Filtrate	155367	09/30/09 12:49	5.0	2	3:NA=1800000
146	09i29m00146	SAMPLE	215104-004	Filtrate	155367	09/30/09 12:59	5.0	2	1:NA=130000
147	09i29m00147	CCV				09/30/09 13:09	1.0	12 2	
148	09i29m00148	CCB				09/30/09 13:19	1.0	2	
149	09i29m00149	X				09/30/09 13:30	1.0	2	
150	09i29m00150	ICSA				09/30/09 13:40	1.0	10 2	7:CA=330000
151	09i29m00151	ICSAB				09/30/09 13:50	1.0	11 2	12:CA=310000
152	09i29m00152	X	RINSE			09/30/09 14:01	1.0	2	
153	09i29m00153	X	RINSE			09/30/09 14:11	1.0	2	
154	09i29m00154	SAMPLE	215166-004	Filtrate	155388	09/30/09 14:21	5.0	2	1:NA=35000
155	09i29m00155	CCV				09/30/09 14:31	1.0	12 2	
156	09i29m00156	CCB				09/30/09 14:41	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019392432

Instrument : MET26 Begun : 09/29/09 12:32
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	09i29m00157	X				09/30/09 14:51	1.0	2	
158	09i29m00158	ICSA				09/30/09 14:57	1.0	10 2	7:CA=330000
159	09i29m00159	ICSAB				09/30/09 15:07	1.0	11 2	12:CA=310000
160	09i29m00160	X	RINSE			09/30/09 15:18	1.0	2	
161	09i29m00161	X	RINSE			09/30/09 15:28	1.0	2	
162	09i29m00162	BLANK	QC513874	Water	155362	09/30/09 15:38	5.0	2	
163	09i29m00163	BS	QC513875	Water	155362	09/30/09 15:49	5.0	2	
164	09i29m00164	BSD	QC513876	Water	155362	09/30/09 15:59	5.0	2	
165	09i29m00165	MSS	215166-001	Water	155362	09/30/09 16:09	5.0	2	1:NA=70000
166	09i29m00166	MS	QC513877	Water	155362	09/30/09 16:19	5.0	2	2:NA=72000
167	09i29m00167	MSD	QC513878	Water	155362	09/30/09 16:29	5.0	2	2:NA=67000
168	09i29m00168	SAMPLE	215166-002	Water	155362	09/30/09 16:39	5.0	2	1:NA=35000
169	09i29m00169	SAMPLE	215166-003	Water	155362	09/30/09 16:50	5.0	2	1:NA=36000
170	09i29m00170	CCV				09/30/09 17:00	1.0	12 2	
171	09i29m00171	X				09/30/09 17:10	1.0	2	
172	09i29m00172	CCB				09/30/09 17:20	1.0	2	
173	09i29m00173	SAMPLE	215166-004	Water	155362	09/30/09 17:30	5.0	2	1:NA=38000
174	09i29m00174	SAMPLE	215166-005	Water	155362	09/30/09 17:40	5.0	2	1:NA=36000
175	09i29m00175	SAMPLE	215166-006	Water	155362	09/30/09 17:51	5.0	2	1:NA=67000
176	09i29m00176	SAMPLE	215166-007	Water	155362	09/30/09 18:01	5.0	2	1:NA=51000
177	09i29m00177	SAMPLE	215166-008	Water	155362	09/30/09 18:11	5.0	2	1:NA=29000
178	09i29m00178	SAMPLE	215166-013	Water	155362	09/30/09 18:21	5.0	2	1:NA=52000
179	09i29m00179	SAMPLE	215166-014	Water	155362	09/30/09 18:32	5.0	2	1:NA=30000
180	09i29m00180	SAMPLE	215166-015	Water	155362	09/30/09 18:42	5.0	2	1:NA=42000
181	09i29m00181	CCV				09/30/09 18:52	1.0	12 2	
182	09i29m00182	CCB				09/30/09 19:02	1.0	2	
183	09i29m00183	X				09/30/09 19:12	1.0	2	
184	09i29m00184	BLANK	QC514318	Water	155467	09/30/09 19:22	5.0	2	
185	09i29m00185	BS	QC514319	Water	155467	09/30/09 19:33	5.0	2	
186	09i29m00186	BSD	QC514320	Water	155467	09/30/09 19:43	5.0	2	
187	09i29m00187	MSS	215217-001	Filtrate	155467	09/30/09 19:53	5.0	2	5:NA=570000
188	09i29m00188	SER	QC514323	Filtrate	155467	09/30/09 20:03	25.0	2	
189	09i29m00189	MS	QC514321	Filtrate	155467	09/30/09 20:13	5.0	2	5:NA=560000
190	09i29m00190	MSD	QC514322	Filtrate	155467	09/30/09 20:23	5.0	2	5:NA=550000
191	09i29m00191	TUN				09/30/09 20:34	1.0	1	
192	09i29m00192	X	RINSE			09/30/09 20:41	1.0	2	
193	09i29m00193	PDS	QC514324	Filtrate	155467	09/30/09 20:51	5.0	13 14 2	
194	09i29m00194	SAMPLE	215217-002	Filtrate	155467	09/30/09 21:01	5.0	2	5:NA=1200000
195	09i29m00195	SAMPLE	215242-003	Water	155467	09/30/09 21:11	5.0	2	4:NA=72000
196	09i29m00196	CCV				09/30/09 21:22	1.0	12 2	
197	09i29m00197	CCB				09/30/09 21:32	1.0	2	
198	09i29m00198	X				09/30/09 21:42	1.0	2	
199	09i29m00199	SAMPLE	215242-005	Water	155467	09/30/09 21:52	5.0	2	2:NA=66000
200	09i29m00200	SAMPLE	215242-006	Water	155467	09/30/09 22:02	5.0	2	2:NA=64000
201	09i29m00201	SAMPLE	215242-007	Water	155467	09/30/09 22:13	5.0	2	1:NA=91000
202	09i29m00202	SAMPLE	215242-008	Water	155467	09/30/09 22:23	5.0	2	2:NA=89000
203	09i29m00203	SAMPLE	215242-009	Water	155467	09/30/09 22:33	5.0	2	5:NA=140000
204	09i29m00204	CCV				09/30/09 22:43	1.0	12 2	
205	09i29m00205	CCB				09/30/09 22:53	1.0	2	
206	09i29m00206	X				09/30/09 23:03	1.0	2	
207	09i29m00207	BLANK	QC514291	Filtrate	155464	09/30/09 23:13	5.0	2	
208	09i29m00208	BS	QC514292	Filtrate	155464	09/30/09 23:24	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019392432

Instrument : MET26 Begun : 09/29/09 12:32
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	09i29m00209	BSD	QC514293	Filtrate	155464	09/30/09 23:34	5.0	2	
210	09i29m00210	MSS	215255-001	Filtrate	155464	09/30/09 23:44	5.0	2	5:NA=1100000
211	09i29m00211	SER	QC514298	Filtrate	155464	09/30/09 23:54	25.0	2	
212	09i29m00212	MS	QC514294	Filtrate	155464	10/01/09 00:04	5.0	2	
213	09i29m00213	MSD	QC514295	Filtrate	155464	10/01/09 00:14	5.0	2	
214	09i29m00214	PDS	QC514299	Filtrate	155464	10/01/09 00:25	5.0	13 14 2	1:NA=1100000
215	09i29m00215	MSS	215255-023	Filtrate	155464	10/01/09 00:35	5.0	2	4:NA=880000
216	09i29m00216	MS	QC514296	Filtrate	155464	10/01/09 00:45	5.0	2	
217	09i29m00217	CCV				10/01/09 00:55	1.0	12 2	
218	09i29m00218	X				10/01/09 01:05	1.0	2	
219	09i29m00219	CCB				10/01/09 01:15	1.0	2	
220	09i29m00220	MSD	QC514297	Filtrate	155464	10/01/09 01:26	5.0	2	
221	09i29m00221	SAMPLE	215255-002	Filtrate	155464	10/01/09 01:36	5.0	2	2:NA=68000
222	09i29m00222	SAMPLE	215255-003	Filtrate	155464	10/01/09 01:46	5.0	2	7:NA=1300000
223	09i29m00223	ICSA				10/01/09 01:56	1.0	10 2	7:CA=330000
224	09i29m00224	ICSAB				10/01/09 02:07	1.0	11 2	11:CA=300000
225	09i29m00225	X	RINSE			10/01/09 02:17	1.0	2	
226	09i29m00226	X	RINSE			10/01/09 02:27	1.0	2	
227	09i29m00227	SAMPLE	215255-004	Filtrate	155464	10/01/09 02:38	5.0	2	5:NA=1200000
228	09i29m00228	SAMPLE	215255-005	Filtrate	155464	10/01/09 02:48	5.0	2	5:NA=1400000
229	09i29m00229	SAMPLE	215255-006	Filtrate	155464	10/01/09 02:58	5.0	2	2:NA=88000
230	09i29m00230	SAMPLE	215255-007	Filtrate	155464	10/01/09 03:08	5.0	2	5:NA=1200000
231	09i29m00231	SAMPLE	215255-008	Filtrate	155464	10/01/09 03:19	5.0	2	5:NA=1200000
232	09i29m00232	CCV				10/01/09 03:29	1.0	12 2	
233	09i29m00233	CCB				10/01/09 03:39	1.0	2	
234	09i29m00234	X				10/01/09 03:49	1.0	2	
235	09i29m00235	SAMPLE	215255-009	Filtrate	155464	10/01/09 03:59	5.0	2	3:NA=71000
236	09i29m00236	SAMPLE	215255-010	Filtrate	155464	10/01/09 04:10	5.0	2	6:NA=1000000
237	09i29m00237	SAMPLE	215255-011	Filtrate	155464	10/01/09 04:20	5.0	2	5:NA=1200000
238	09i29m00238	SAMPLE	215255-012	Filtrate	155464	10/01/09 04:30	5.0	2	3:NA=140000
239	09i29m00239	SAMPLE	215255-013	Filtrate	155464	10/01/09 04:40	5.0	2	5:NA=1100000
240	09i29m00240	SAMPLE	215255-014	Filtrate	155464	10/01/09 04:50	5.0	2	5:NA=1100000
241	09i29m00241	SAMPLE	215255-015	Filtrate	155464	10/01/09 05:01	5.0	2	1:NA=20000
242	09i29m00242	SAMPLE	215255-016	Filtrate	155464	10/01/09 05:11	5.0	2	6:NA=860000
243	09i29m00243	SAMPLE	215255-017	Filtrate	155464	10/01/09 05:21	5.0	2	8:NA=1400000
244	09i29m00244	CCV				10/01/09 05:31	1.0	12 2	
245	09i29m00245	CCB				10/01/09 05:41	1.0	2	
246	09i29m00246	X				10/01/09 05:51	1.0	2	
247	09i29m00247	ICSA				10/01/09 06:02	1.0	10 2	7:CA=330000
248	09i29m00248	ICSAB				10/01/09 06:12	1.0	11 2	11:CA=310000
249	09i29m00249	X	RINSE			10/01/09 06:22	1.0	2	
250	09i29m00250	X	RINSE			10/01/09 06:33	1.0	2	
251	09i29m00251	X	RINSE			10/01/09 06:43	1.0	2	
252	09i29m00252	X	RINSE			10/01/09 06:53	1.0	2	
253	09i29m00253	X	RINSE			10/01/09 07:03	1.0	2	

JYF 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 248.

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019392432

Date : 09/29/09 Reference : 09i29m00003
Sequence : MET26 09i29m00 Analyzed : 09/29/09 12:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1345098	3362294	58271	830697	235142	41264	4521812	3705169	5027589	5812524
		LOWER LIMIT	403529	1008688	17481	249209	70543	12379	1356544	1111551	1508277	1743757
		UPPER LIMIT	1614118	4034753	69925	996836	282170	49517	5426174	4446203	6033107	6975029
016	ICB		1314447	3311432	56054	829770	233130	41010	4532018	3689485	5042236	5942846
018	ICSA		1064016	3087942	53549	822037	219959	39610	3861869	3141048	4596524	5444039
019	ICSAB		1083854	3031297	52732	772162	210707	38924	3859293	3082770	4568278	5479204
022	SAMPLE	215106-002	1264705	3122893	53800	781537	221772	39558	4365866	3667575	4791998	5758399
023	SAMPLE	215106-003	1229402	3036445	51882	743071	213885	38201	4250617	3587126	4725756	5662889
024	SAMPLE	215106-004	1261445	3049213	51388	752438	217812	38049	4325218	3606383	4750494	5688612
025	SAMPLE	215106-005	1260429	3034647	51596	741162	213581	38447	4278104	3550077	4704146	5686941
026	SAMPLE	215106-006	1252832	3047152	51771	744013	214832	38352	4274287	3537656	4747514	5690714
027	SAMPLE	215106-007	1229136	3059670	51341	728576	212220	38159	4311855	3539416	4753602	5719888
028	SAMPLE	215106-008	1231331	3056624	51601	755021	213267	37707	4274024	3552407	4784463	5693746
029	SAMPLE	215106-009	1236679	3054638	51239	744400	211724	37737	4282102	3470162	4745570	5744342
030	CCV		1215188	3058445	51289	754259	210217	37349	4255440	3467004	4737105	5699770
031	CCB		1256514	3067479	52392	758704	213790	38248	4357843	3536186	4770745	5715237
033	SAMPLE	215106-011	1246229	2996139	50287	729832	209885	37603	4282466	3558452	4690685	5659532
034	SAMPLE	215106-012	1204993	2942649	49662	712200	209386	37287	4134885	3437536	4538106	5574772
035	CCV		1211463	3024452	50116	739042	207016	36802	4196363	3465515	4723185	5713622
036	CCB		1241101	3018358	50048	739602	210042	37044	4336476	3534868	4740353	5728658
037	BLANK	QC513899	1225087	3016041	49932	731910	209013	37322	4340480	3608288	4749884	5745022
038	BS	QC513900	1204026	3001695	50250	729825	207686	37373	4302777	3570304	4719904	5725763
039	BSD	QC513901	1234427	3023143	50284	731686	208035	37036	4318275	3572770	4711994	5745466
040	MSS	215104-002	1053010	3024220	53525	724781	186671	35145	3478439	2590897	4194298	4789136
041	SER	QC513904	1311802	3270252	56904	810183	217447	39564	4123668	3130115	4795397	5564025
042	MS	QC513902	1066587	3061832	54300	746966	190384	35408	3518965	2599655	4243470	4816054
043	MSD	QC513903	1081524	3082375	54863	752635	191214	35765	3545051	2552086	4306842	4757555
044	PDS	QC513905	1061065	3075434	54575	757106	190077	35221	3542417	2561600	4305285	4835792
045	SAMPLE	215104-003	1071438	3148872	56479	762919	193320	36770	3534101	2527018	4372557	4748734
046	SAMPLE	215104-004	1281869	3216596	54933	794292	218718	39560	4270539	3328284	4824236	5635218
047	CCV		1296573	3242898	54778	786444	217443	39522	4397279	3434906	4956028	5781114
048	CCB		1316913	3200550	55251	789943	222243	39959	4463226	3500823	4934922	5785194
050	BLANK	QC513874	1284676	3079139	51562	745387	214524	38383	4373562	3593847	4856676	5702770
051	BS	QC513875	1264280	3085876	51071	742838	213002	38251	4319057	3534325	4839424	5684995
052	BSD	QC513876	1227905	3084817	50888	750623	212571	37931	4331515	3533348	4826910	5736951
053	MSS	215166-001	1211589	3021856	49622	715320	207253	37462	4219344	3379748	4676382	5605801
054	MS	QC513877	1163293	2979665	48729	719099	204555	36454	4181071	3337409	4688909	5619506
055	MSD	QC513878	1162740	3002488	48231	710432	203203	36479	4229949	3345991	4693537	5644843
056	SAMPLE	215166-002	1191688	2973258	48406	705849	206207	36893	4243781	3372917	4656576	5673433
057	SAMPLE	215166-003	1185698	2972408	47916	702545	201905	36523	4220597	3355321	4629124	5640485
058	SAMPLE	215166-004	1167620	2972453	47400	691569	201355	36045	4176315	3330097	4589309	5571676
059	SAMPLE	215166-005	1166181	2948375	47095	687065	199464	35617	4194710	3343078	4615474	5593298
060	CCV		1162571	3008611	48185	715700	197149	35531	4226306	3374845	4713604	5678460
061	CCB		1195702	2998557	48565	716661	201105	36380	4339610	3456872	4733703	5649521
063	SAMPLE	215166-006	1139344	2950704	46727	684324	198294	35606	4168836	3364167	4621868	5589662
066	SAMPLE	215166-007	1135899	2900798	45744	678672	197199	35404	4202137	3356170	4594897	5607055
067	SAMPLE	215166-008	1133289	2932404	46286	681718	199259	35664	4217989	3394563	4627139	5648783
068	SAMPLE	215166-009	1125954	2922514	45750	685304	198521	35531	4186843	3365433	4627592	5626966
069	SAMPLE	215166-010	1133318	2933272	45851	686087	198978	35741	4211858	3403494	4653771	5666177
070	SAMPLE	215166-011	1084637	2899546	45015	669521	192737	34623	4175830	3305947	4592192	5633991
071	SAMPLE	215166-012	1109840	2937871	45678	675227	195063	35213	4205860	3367166	4630477	5642048

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019392432

Date : 09/29/09 Reference : 09i29m00003
Sequence : MET26 09i29m00 Analyzed : 09/29/09 12:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
072	SAMPLE	215166-013	1108492	2931291	45531	673052	195057	34752	4187367	3335838	4601589	5598245
073	SAMPLE	215166-014	1123225	2930879	45443	674776	194163	34981	4197196	3324132	4594452	5654247
074	SAMPLE	215166-015	1117749	2909032	45298	664890	193460	34735	4191132	3341847	4603966	5627455
075	CCV		1135289	2980452	46374	691912	192228	34422	4225326	3376988	4676695	5659587
077	CCB		1181301	2974716	46958	691168	195608	35215	4304782	3478332	4697101	5657076
078	SAMPLE	215166-016	1124294	2972557	46113	679551	194643	35341	4319229	3506470	4698076	5738165
079	CCV		1132546	3033864	47295	704776	195696	35309	4273477	3388846	4760636	5706328
080	CCB		1171184	3039775	48071	705076	199605	35677	4369224	3503446	4800355	5764947
081	BLANK	QC513667	1169541	3038910	48098	697510	198862	35870	4364475	3516475	4769411	5732431
082	BS	QC513668	1164719	3073546	48575	712749	198546	36057	4369348	3513487	4819327	5744795
083	ICSA		983175	2920796	46389	670566	182068	34859	3756415	2885827	4452538	5336672
084	ICSAB		994082	2904352	45344	667071	182920	34249	3771252	2877383	4462191	5331686
087	BSD	QC513669	1181788	3033521	47853	699725	197567	35464	4330438	3463083	4757013	5643397
088	MSS	215072-005	1155604	3028313	47030	683948	192466	35389	4278905	3383255	4729702	5617686
089	SER	QC513673	1185784	2983725	46432	681622	195154	35160	4264165	3426897	4663874	5602588
090	MS	QC513670	1140960	2913901	44709	659220	186788	33605	4136328	3266260	4592558	5521255
091	MSD	QC513671	1129418	2922814	45609	667081	186951	33888	4144580	3301177	4609192	5551862
092	PDS	QC513672	1126322	2946811	44989	661919	184872	33586	4107001	3264229	4596162	5516278
093	CCV		1150967	2979163	46188	675443	188912	34539	4203196	3347965	4680155	5610954
095	CCB		1181298	2973069	46011	676731	190644	34464	4273138	3410995	4680313	5617131
096	SAMPLE	215072-010	1148195	2907228	44580	649512	187093	33493	4151731	3392271	4609856	5490909
097	SAMPLE	215072-011	1140554	2888330	44569	651479	185759	33499	4131289	3291633	4549282	5490593
098	BLANK	QC513991	1187567	2941050	45246	659203	187203	33957	4247021	3399837	4668322	5574639
099	BS	QC513992	1159305	2924895	44539	657504	185647	33820	4211824	3407444	4624116	5584749
100	BSD	QC513993	1147220	2930014	44335	657147	185906	33484	4213388	3407934	4620138	5562269
101	MSS	214996-001	1132304	2915073	43605	640182	182846	32837	4129075	3320622	4575714	5523623
102	SER	QC513996	1172856	2932856	44355	651500	187689	33671	4239161	3416279	4596143	5581905
103	MS	QC513994	1146178	2894189	43523	634914	180483	32651	4109775	3281350	4565127	5518542
104	MSD	QC513995	1143065	2923958	43435	643567	182430	32889	4146390	3297059	4587294	5511273
105	PDS	QC513997	1135286	2942887	43755	647355	181470	32887	4122605	3245346	4607125	5554436
106	CCV		1135573	2968303	43918	655801	184917	33343	4149404	3349726	4643801	5565341
108	CCB		1160298	2935632	44209	653038	185871	33160	4255525	3406533	4650984	5552934
109	SAMPLE	214997-001	1117874	2873415	42990	632728	178760	32340	4031016	3192580	4478618	5398207
110	SAMPLE	214997-003	1111432	2910160	42983	635677	176250	31774	4001375	3142412	4481030	5377451
111	SAMPLE	214997-004	1124952	2877989	42885	635050	179001	32174	4016432	3201657	4450169	5401211
112	SAMPLE	215166-001	1122034	2902878	42920	635599	180888	32564	4102772	3288010	4540914	5446220
113	SAMPLE	215166-002	1131812	2892500	43070	639033	182041	32828	4159344	3291987	4568428	5497258
114	SAMPLE	215166-003	1117305	2899271	42805	631387	180737	32641	4156650	3263384	4551149	5553195
115	SAMPLE	215166-004	1128727	2906753	42862	635038	180457	32714	4160574	3279115	4557565	5530711
116	SAMPLE	215166-005	1135899	2906402	42665	634647	181393	32319	4175510	3310442	4574437	5541951
117	SAMPLE	215166-006	1126046	2921962	42467	625794	177956	32148	4108070	3281372	4579483	5492294
118	SAMPLE	215166-007	1143095	2890485	42237	624367	178137	31934	4119913	3268403	4529807	5495824
119	CCV		1141352	2908839	42001	629119	177118	31857	4133756	3304148	4559038	5493468
121	CCB		1163031	2879201	42214	627692	178871	32167	4178641	3368749	4557642	5523780
122	SAMPLE	215166-008	1145086	2883169	41421	620691	177997	31828	4096567	3303167	4518711	5477596
123	SAMPLE	215166-009	1139601	2859051	41458	619953	177032	31795	4113620	3275487	4517953	5503167
124	SAMPLE	215166-010	1146895	2850000	41470	619691	178167	31894	4086603	3302727	4488029	5434459
125	SAMPLE	215166-011	1115329	2862210	41048	614236	173986	31525	4049324	3228888	4506721	5474866
126	SAMPLE	215166-012	1140559	2870236	41490	623199	177108	31825	4101208	3242454	4513216	5465234
129	SAMPLE	215166-013	1132460	2829425	41476	618494	176730	31619	4056135	3256038	4452404	5443863
130	SAMPLE	215166-014	1138166	2854197	41087	616743	176734	31470	4039350	3234205	4440057	5421116
131	SAMPLE	215166-015	1132644	2823298	40971	613960	175261	31107	4060550	3216982	4402626	5416331

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019392432

Date : 09/29/09 Reference : 09i29m00003
Sequence : MET26 09i29m00 Analyzed : 09/29/09 12:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
132	SAMPLE	215166-016	1177722	2835747	41811	624650	178288	31666	4139003	3335382	4501293	5487035
133	SAMPLE	215186-016	1201265	2886549	42119	627544	179519	32013	4190338	3445710	4569547	5492021
134	CCV		1134666	2883701	41715	629512	178522	31672	4044770	3260483	4527243	5495851
136	CCB		1185482	2850433	42253	630312	180034	32012	4121832	3357744	4504012	5445634
137	BLANK	QC513899	1139621	2848745	41372	622728	178549	31668	4115830	3360426	4508862	5474590
138	BS	QC513900	1131626	2840823	41685	629578	179255	31667	4100522	3338558	4492439	5489569
139	BSD	QC513901	1130895	2825593	41552	627777	179414	31916	4100830	3336979	4473556	5469108
140	MSS	215104-002	958359	2829437	44098	618865	159457	29862	3359743	2458245	4026807	4590211
141	SER	QC513904	1184300	3073955	47590	701442	189143	33688	3943500	2952469	4569924	5292146
142	MS	QC513902	982243	2865128	45104	635085	162690	30342	3371813	2456305	4060306	4621463
143	MSD	QC513903	991232	2905268	45535	647393	165393	30373	3396691	2455139	4125247	4624431
144	PDS	QC513905	992264	2844879	44994	648990	164807	30196	3378384	2434872	4085427	4640778
145	SAMPLE	215104-003	994452	2904018	46756	657548	168171	31215	3398206	2429306	4108765	4613988
146	SAMPLE	215104-004	1182738	2926047	44905	672964	188909	33254	4016411	3092240	4504505	5285081
147	CCV		1188737	2932619	44199	647700	183244	32727	4115438	3196298	4607051	5444965
148	CCB		1230884	2893574	44365	652435	186737	33421	4198729	3278357	4604713	5470073
150	ICSA		1001765	2689686	41396	602887	165214	31585	3573841	2697279	4222704	5056017
151	ICSAB		1006543	2659585	40477	598593	166913	30809	3559572	2690445	4181881	5006291
154	SAMPLE	215166-004	1162307	2703799	40990	597200	173819	31067	3915830	3087312	4337740	5137279
155	CCV		1138306	2668422	40313	596574	171575	30454	3884027	3052389	4274958	5178809
156	CCB		1169596	2694389	41510	604431	175039	31446	3958748	3139263	4330916	5201936
158	ICSA		983477	2601632	40019	583804	162393	30584	3471470	2634285	4090965	4901852
159	ICSAB		994538	2544570	39502	577038	162592	30353	3467718	2599721	4041210	4879485
162	BLANK	QC513874	1121934	2561176	39809	577208	170819	30777	3847889	3067199	4185526	5051812
163	BS	QC513875	1077274	2475891	37643	554616	164522	29409	3737672	2971963	4055783	4966135
164	BSD	QC513876	1084308	2498510	37881	554536	164649	29485	3742305	2973015	4095828	5005739
165	MSS	215166-001	1066258	2477373	37421	547728	164027	29613	3654867	2900087	4009459	4886123
166	MS	QC513877	1024255	2449002	36829	541054	161121	28863	3605213	2809281	3977203	4878459
167	MSD	QC513878	1028072	2448194	36791	542456	161155	29013	3620854	2810423	3984541	4888983
168	SAMPLE	215166-002	1068182	2479950	37644	547822	164440	29593	3708979	2881037	4036641	4930004
169	SAMPLE	215166-003	1077403	2496504	37814	548549	164206	29635	3686587	2882182	4047676	4905916
170	CCV		1090842	2507658	38563	562272	161872	29070	3709199	2920199	4068761	4991068
172	CCB		1125750	2491953	39057	565870	164583	29623	3793819	3002817	4078205	4972505
173	SAMPLE	215166-004	1050111	2463954	37771	552466	164491	29572	3679980	2886536	3998548	4903143
174	SAMPLE	215166-005	1063347	2463453	37534	548432	163748	29587	3680120	2878856	3983971	4918562
175	SAMPLE	215166-006	1055283	2472330	37909	550190	163768	29816	3672657	2892678	4035358	4927446
176	SAMPLE	215166-007	1052963	2482133	38102	553991	165016	29903	3706473	2889534	4024696	4944041
177	SAMPLE	215166-008	1063403	2493191	38149	554037	165742	30066	3752312	2907798	4035651	5003896
178	SAMPLE	215166-013	1062059	2515526	38222	558156	166507	30088	3718892	2872729	4047715	4960781
179	SAMPLE	215166-014	1071322	2521891	38496	558815	166171	30056	3734035	2908474	4083047	4984368
180	SAMPLE	215166-015	1055834	2517921	38483	559299	166546	30051	3731197	2893562	4072282	5020725
181	CCV		1074774	2557247	39132	574663	165657	29767	3749778	2952925	4128972	5072475
182	CCB		1102325	2603302	39786	574054	167728	30360	3871780	3040575	4205992	5093358
184	BLANK	QC514318	1120124	2585450	39905	582294	168915	30571	3903589	3055568	4217115	5093915
185	BS	QC514319	1103542	2597461	40334	588038	170074	30403	3870747	3050245	4213047	5106878
186	BSD	QC514320	1114187	2608467	40668	587095	169963	30866	3896706	3071722	4229661	5152212
187	MSS	215217-001	1021989	2659748	40360	580291	158864	29263	3609980	2730254	4718795	4915514
188	SER	QC514323	1099034	2677906	41122	595329	170823	30894	3861763	2947159	4400155	5115661
189	MS	QC514321	1029220	2704460	41054	583668	158861	29191	3601708	2704384	4735036	4904716
190	MSD	QC514322	1043763	2688689	41477	588431	160983	29526	3632068	2699047	4734366	4879778
193	PDS	QC514324	1009614	2582952	39709	564087	153956	28408	3515949	2631549	4611872	4832467
194	SAMPLE	215217-002	1001912	2734405	43214	592843	154802	29298	3430310	2464993	4025111	4629126

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019392432

Date : 09/29/09 Reference : 09i29m00003
Sequence : MET26 09i29m00 Analyzed : 09/29/09 12:49

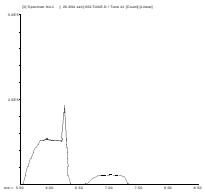
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
196	CCV		1125158	2656683	40794	592882	169250	30673	3866985	2987134	4274943	5130511
197	CCB		1144433	2615705	40872	587895	169834	30844	3927527	3050765	4254914	5135918
204	CCV		1123827	2653262	40435	586886	167539	30486	3870570	3008539	4255490	5157363
205	CCB		1138294	2627089	40326	582279	167911	30683	3914075	3065413	4256495	5113156
207	BLANK	QC514291	1136167	2597056	39953	581665	167168	30276	3907010	3073938	4202158	5113133
208	BS	QC514292	1126462	2627579	40751	583393	167480	30550	3903462	3084142	4225317	5145821
209	BSD	QC514293	1118389	2643263	40669	586807	168199	30838	3931260	3082109	4241210	5179710
210	MSS	215255-001	1013535	2784686	43714	593980	155737	29548	3509573	2516842	4090759	4683078
211	SER	QC514298	1166931	2801389	43853	614260	169033	31380	3804683	2823923	4337816	5030884
212	MS	QC514294	1003719	2821862	45261	621357	161971	30387	3476652	2494503	4117209	4670806
213	MSD	QC514295	1008895	2822854	45661	627599	162978	30438	3503354	2501807	4149582	4684874
214	PDS	QC514299	1022621	2825645	45403	633199	165009	30500	3528162	2523411	4152187	4698265
215	MSS	215255-023	1028107	2717542	42874	607087	164929	30052	3562125	2574876	4101474	4721416
216	MS	QC514296	1020429	2696160	42246	592993	159512	29686	3524422	2549928	4082505	4707441
217	CCV		1138551	2681408	41804	604783	171828	31126	3924123	2983368	4316101	5137776
219	CCB		1160230	2593700	40911	584502	168215	30477	3888663	3041372	4224326	5071999
220	MSD	QC514297	995997	2607798	40156	562805	151607	28472	3464591	2553990	3982654	4660269
221	SAMPLE	215255-002	1114102	2576967	39282	570121	163595	29827	3752043	2928584	4176288	5014539
222	SAMPLE	215255-003	959975	2594522	39482	554492	144148	27059	3345677	2439394	4319256	4514602
223	ICSA		978656	2575576	39957	580451	158227	30349	3425320	2540185	4054877	4822405
224	ICSAB		962779	2445693	37501	544530	151713	28629	3326943	2494053	3903718	4706986
227	SAMPLE	215255-004	990830	2567731	38977	535686	142194	26976	3332627	2422097	3878563	4478311
228	SAMPLE	215255-005	984368	2632058	41782	570276	150294	28099	3324739	2348969	3929782	4443775
229	SAMPLE	215255-006	1039184	2458818	38065	556776	158436	28721	3628950	2798494	4101210	4813275
230	SAMPLE	215255-007	992505	2628361	40712	556206	146786	27968	3376895	2402343	3949213	4497025
231	SAMPLE	215255-008	998871	2710419	43170	588210	153896	28948	3373925	2357935	4011840	4451351
232	CCV		1059282	2513496	38699	562219	160926	29186	3688300	2820626	4091662	4870407
233	CCB		1051830	2430556	37536	539774	157511	28691	3700929	2867510	4006730	4829495
235	SAMPLE	215255-009	960330	2307952	34879	501381	145851	26977	3492006	2746781	3830357	4652851
236	SAMPLE	215255-010	944256	2573792	38411	534670	139145	26740	3311841	2422895	6429549 *	4561969
237	SAMPLE	215255-011	945650	2603423	39606	545887	145730	27512	3389024	2376558	3958948	4492693
238	SAMPLE	215255-012	1011650	2437140	37356	542089	153785	27909	3567548	2715276	4025028	4741351
239	SAMPLE	215255-013	929707	2505013	37431	521333	139146	26042	3297210	2376003	3838190	4415062
240	SAMPLE	215255-014	952963	2551656	38615	539873	142167	26723	3340827	2395667	3899190	4461622
241	SAMPLE	215255-015	1072496	2545272	39092	572806	164347	29705	3777174	2922494	4138204	4893561
242	SAMPLE	215255-016	910859	2938412	44177	624816	140704	27497	3298182	2409383	11768413 *	4746359
243	SAMPLE	215255-017	883529	2597378	38596	548232	134438	26257	3151879	2264937	8799263 *	4456655
244	CCV		1079004	2604049	39368	577806	163320	29103	3733256	2832857	4168071	4900040
245	CCB		1068762	2463134	37567	548064	157628	28381	3728523	2861611	4035304	4847222
247	ICSA		910135	2365323	35102	506071	140153	27140	3217743	2396398	3787345	4533620
248	ICSAB		899029	2312736	34150	498198	139269	26357	3179065	2367036	3754362	4490969

MET26 QC Tune Report

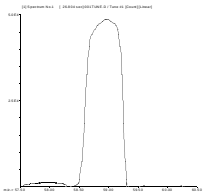
Data File: C:\ICPCHEM\1\DATA\09I29m00.B\001TUNE.D
Date Acquired: Sep 29 2009 12:32 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

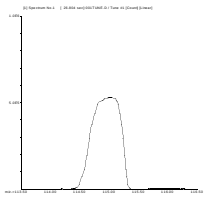
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	161873	161802	160851	160220	0.66	5.00	
59 Co	295415	296472	293336	291529	0.93	5.00	
115 In	3001123	3019280	2976186	2992570	0.80	5.00	
205 Tl	233750	234330	231919	233064	0.36	5.00	



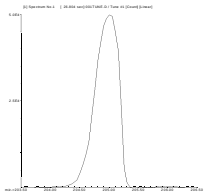
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



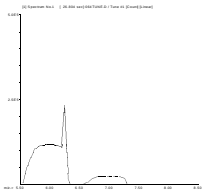
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

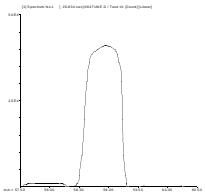
Data File: C:\ICPCHEM\1\DATA\09I29m00.B\064TUNE.D
Date Acquired: Sep 29 2009 11:11 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

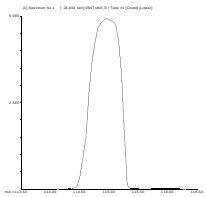
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	143875	143990	143211	143784	0.56	5.00	
59 Co	251448	251458	251950	251990	0.47	5.00	
115 In	2820864	2792874	2807961	2817884	0.92	5.00	
205 Tl	211308	211847	213046	213444	0.45	5.00	



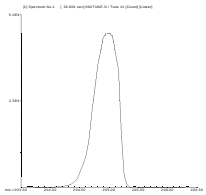
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 114.95
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



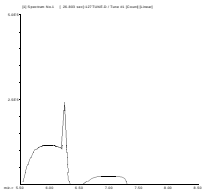
205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET26 QC Tune Report

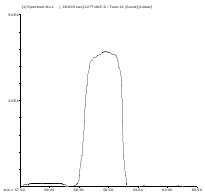
Data File: C:\ICPCHEM\1\DATA\09I29m00.B\127TUNE.D
Date Acquired: Sep 30 2009 09:49 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

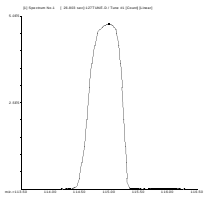
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	141873	142061	140936	141443	0.88	5.00	
59 Co	242332	243022	241722	242096	0.11	5.00	
115 In	2742121	2745269	2753677	2730861	0.44	5.00	
205 Tl	204277	205089	205611	205714	1.12	5.00	



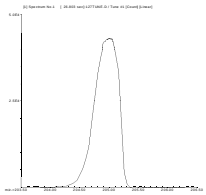
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Water: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019392432001 Date : 29-SEP-2009 12:49
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i29m00004	1019392432004		29-SEP-2009 12:59	S12854, S12847
L2	09i29m00005	1019392432005		29-SEP-2009 13:10	S12855, S12847
L3	09i29m00006	1019392432006		29-SEP-2009 13:20	S12856, S12847
L4	09i29m00007	1019392432007		29-SEP-2009 13:30	S12857, S12847
L5	09i29m00008	1019392432008		29-SEP-2009 13:40	S12852, S12847
L6	09i29m00011	1019392432011		29-SEP-2009 14:09	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0058	0.0043	0.0042	0.0041	0.0040	0.0039	BLNK	-4.8335	253.466		0.0044	1.000	0.995	
Antimony	A	0.0070	0.0027	0.0027	0.0027	0.0028	0.0027	BLNK	-0.0140	369.540		0.0034	1.000	0.995	
Barium	A	0.0014	8.6E-4	8.1E-4	7.7E-4	7.5E-4	7.7E-4	BLNK	-0.0114	1300.37		8.9E-4	1.000	0.995	
Beryllium	A	0.0038	0.0025	0.0025	0.0025	0.0025	0.0022	BLNK	-0.0337	438.981		0.0027	0.998	0.995	
Cadmium	A	8.4E-4	6.7E-4	6.8E-4	6.7E-4	6.6E-4	6.5E-4	BLNK	-0.0087	1539.31		7.0E-4	1.000	0.995	
Calcium	A	9.0E-4	3.3E-4	2.5E-4	1.9E-4	1.8E-4	1.8E-4	BLNK	-36.940	5692.78		3.4E-4	1.000	0.995	
Lead	A	0.0235	0.0089	0.0073	0.0058	0.0057	0.0055	BLNK	-0.3086	181.144		0.0094	1.000	0.995	
Magnesium	A	0.0044	0.0036	0.0033	0.0032	0.0031	0.0030	BLNK	-1.2884	331.324		0.0034	1.000	0.995	
Potassium	A	0.0746	0.0196	0.0126	0.0064	0.0056	0.0055	BLNK	-125.91	181.678		0.0207	1.000	0.995	
Silver	A	0.0046	0.0033	0.0032	0.0032	0.0032	0.0031	BLNK	-0.0181	322.406		0.0034	1.000	0.995	
Thallium	A	0.0095	0.0068	0.0064	0.0062	0.0068	0.0067	BLNK	-0.0251	149.455		0.0071	1.000	0.995	
Arsenic	E	0.0080	0.0060	0.0056	0.0055	0.0054	0.0054	BLNK	-0.0331	186.390		0.0060	1.000	0.995	
Chromium	E	0.1092	0.0496	0.0396	0.0342	0.0332	0.0331	BLNK	-0.1316	30.2177		0.0498	1.000	0.995	
Manganese	E	0.0298	0.0170	0.0160	0.0149	0.0144	0.0144	BLNK	-0.0128	69.5275		0.0177	1.000	0.995	
Nickel	E	0.0299	0.0199	0.0179	0.0171	0.0165	0.0163	BLNK	-0.0230	61.3755		0.0196	1.000	0.995	
Sodium	E	0.0254	0.0078	0.0058	0.0039	0.0034	0.0033	BLNK	-62.050	299.239		0.0083	1.000	0.995	
Zinc	E	0.1107	0.0304	0.0195	0.0096	0.0083	0.0080	BLNK	-0.2322	123.804		0.0311	1.000	0.995	
Iron	H	0.0125	0.0084	0.0081	0.0079	0.0077	0.0077	BLNK	-0.9444	130.005		0.0087	1.000	0.995	
Selenium	H	0.0013	0.0011	0.0011	0.0010	0.0010	0.0010	BLNK	-0.0357	991.346		0.0011	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	-2	50.00	0	100.0	1	1000	3	10000	0	20000	0
Antimony	A	0.100	**146**	0.500	-2	1.000	0	10.00	-1	100.0	2	200.0	0
Barium	A	0.100	**67**	0.500	10	1.000	4	10.00	1	100.0	-3	200.0	1
Beryllium	A	0.100	**33**	0.500	4	1.000	8	10.00	8	100.0	8	200.0	-2
Cadmium	A	0.100	**21**	0.500	2	1.000	4	10.00	3	100.0	1	200.0	0
Calcium	A	10.00	**45**	50.00	14	100.0	5	1000	4	10000	1	20000	0
Lead	A	0.100	17	0.500	0	1.000	1	10.00	2	100.0	2	200.0	-1
Magnesium	A	10.00	**33**	50.00	18	100.0	7	1000	4	10000	1	20000	0
Potassium	A	10.00	-4	50.00	5	100.0	3	1000	3	10000	0	20000	0
Silver	A	0.100	**31**	0.500	4	1.000	2	10.00	2	100.0	3	200.0	-1
Thallium	A	0.050	-8	0.250	-8	0.500	-9	5.000	-7	50.00	2	100.0	0
Arsenic	E	0.100	16	0.500	5	1.000	1	10.00	2	100.0	1	200.0	0
Chromium	E	0.100	**98**	0.500	**24**	1.000	6	10.00	2	100.0	0	200.0	0
Manganese	E	0.100	**94**	0.500	16	1.000	10	10.00	4	100.0	0	200.0	0
Nickel	E	0.100	**61**	0.500	18	1.000	8	10.00	5	100.0	1	200.0	0
Sodium	E	10.00	**40**	50.00	10	100.0	11	1000	9	10000	0	20000	0
Zinc	E	0.100	**1039**	0.500	**230**	1.000	**119**	10.00	16	100.0	2	200.0	-1
Iron	H	10.00	**53**	50.00	8	100.0	5	1000	2	10000	0	20000	0
Selenium	H	0.100	-4	0.500	2	1.000	6	10.00	1	100.0	2	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Water
EPA 6020

Inst : MET26
Calnum : 1019392432001 Cal Date : 29-SEP-2009

ICV 1019392432015 (09i29m00015 29-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10130	ug/L	1	10	
Antimony	A	100.0	102.5	ug/L	3	10	
Barium	A	100.0	96.48	ug/L	-4	10	
Beryllium	A	100.0	106.3	ug/L	6	10	
Cadmium	A	100.0	100.7	ug/L	1	10	
Calcium	A	10000	9840	ug/L	-2	10	
Lead	A	100.0	101.3	ug/L	1	10	
Magnesium	A	10000	10050	ug/L	1	10	
Potassium	A	10000	10050	ug/L	1	10	
Silver	A	100.0	103.7	ug/L	4	10	
Thallium	A	50.00	51.21	ug/L	2	10	
Arsenic	E	100.0	102.0	ug/L	2	10	
Chromium	E	100.0	100.7	ug/L	1	10	
Manganese	E	100.0	98.64	ug/L	-1	10	
Nickel	E	100.0	101.0	ug/L	1	10	
Sodium	E	10000	10000	ug/L	0	10	
Zinc	E	100.0	99.38	ug/L	-1	10	
Iron	H	10000	9972	ug/L	0	10	
Selenium	H	100.0	100.8	ug/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432016 File : 09i29m00016 Time : 29-SEP-2009 15:07
Cal : 1019392432001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.146]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1314447	-2.28
Scandium	A	3362294	3311432	-1.51
Scandium	E	58271	56054	-3.80
Scandium	H	830697	829770	-0.11
Germanium	H	235142	233130	-0.86
Germanium	E	41264	41010	-0.62
Indium	A	4521812	4532018	0.23
Bismuth	A	3705169	3689485	-0.42
Yttrium	A	5027589	5042236	0.29
Terbium	A	5812524	5942846	2.24

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432018 File : 09i29m00018 Time : 29-SEP-2009 15:25
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3156	0.1000	ug/L	!a+
Barium	A	1.335	0.1000	ug/L	!a+
Beryllium	A	[0.03820]	0.1000	ug/L	
Cadmium	A	3.193	0.1000	ug/L	!a+
Lead	A	1.361	0.1000	ug/L	!a+
Silver	A	0.1797	0.1000	ug/L	!a+
Thallium	A	0.08450	0.05000	ug/L	!a+
Arsenic	E	0.3630	0.1000	ug/L	!a+
Chromium	E	1.228	0.1000	ug/L	!a+
Manganese	E	6.787	0.1000	ug/L	!a+
Nickel	E	4.090	0.1000	ug/L	!a+
Zinc	E	6.696	0.1000	ug/L	!a+
Selenium	H	0.2126	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	109300	ug/L	109
Calcium	A	300000	326200	ug/L	109
Magnesium	A	100000	105100	ug/L	105
Molybdenum	A	2000	2135	ug/L	107
Potassium	A	100000	109700	ug/L	110
Sodium	E	250000	266600	ug/L	107
Iron	H	250000	250000	ug/L	100

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1064016	-20.90
Scandium	A	3362294	3087942	-8.16
Scandium	E	58271	53549	-8.10
Scandium	H	830697	822037	-1.04
Germanium	H	235142	219959	-6.46
Germanium	E	41264	39610	-4.01
Indium	A	4521812	3861869	-14.59
Bismuth	A	3705169	3141048	-15.23
Yttrium	A	5027589	4596524	-8.57
Terbium	A	5812524	5444039	-6.34

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432019 File : 09i29m00019 Time : 29-SEP-2009 15:36
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	102500	ug/L	3		
Cadmium	A	100.0	106.2	ug/L	6	20	
Calcium	A	300000	308300	ug/L	3		
Magnesium	A	100000	100400	ug/L	0		
Potassium	A	100000	103600	ug/L	4		
Silver	A	50.00	50.59	ug/L	1	20	
Arsenic	E	100.0	103.9	ug/L	4	20	
Chromium	E	200.0	208.1	ug/L	4	20	
Manganese	E	200.0	210.2	ug/L	5	20	
Nickel	E	200.0	195.6	ug/L	-2	20	
Sodium	E	250000	252600	ug/L	1		
Zinc	E	100.0	94.18	ug/L	-6	20	
Iron	H	250000	249000	ug/L	0		
Selenium	H	100.0	104.9	ug/L	5	20	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	830697	772162	-7.05
Scandium	A	3362294	3031297	-9.84
Scandium	E	58271	52732	-9.51
Germanium	H	235142	210707	-10.39
Germanium	E	41264	38924	-5.67
Indium	A	4521812	3859293	-14.65
Yttrium	A	5027589	4568278	-9.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432079 File : 09i29m00079 Time : 30-SEP-2009 01:40
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0044	0.0039	10000	9842	ug/L	-2	10	
Antimony	A	0.0034	0.0028	100.0	101.9	ug/L	2	10	
Barium	A	8.9E-4	7.3E-4	100.0	94.58	ug/L	-5	10	
Beryllium	A	0.0027	0.0024	100.0	103.8	ug/L	4	10	
Cadmium	A	7.0E-4	6.4E-4	100.0	97.93	ug/L	-2	10	
Calcium	A	3.4E-4	1.7E-4	10000	9808	ug/L	-2	10	
Lead	A	0.0094	0.0054	100.0	98.40	ug/L	-2	10	
Magnesium	A	0.0034	0.0029	10000	9692	ug/L	-3	10	
Potassium	A	0.0207	0.0055	10000	9879	ug/L	-1	10	
Silver	A	0.0034	0.0031	100.0	100.6	ug/L	1	10	
Thallium	A	0.0071	0.0070	50.00	51.95	ug/L	4	10	
Arsenic	E	0.0060	0.0054	100.0	99.97	ug/L	0	10	
Chromium	E	0.0498	0.0339	100.0	102.4	ug/L	2	10	
Manganese	E	0.0177	0.0142	100.0	98.76	ug/L	-1	10	
Nickel	E	0.0196	0.0170	100.0	104.2	ug/L	4	10	
Sodium	E	0.0083	0.0034	10000	10000	ug/L	0	10	
Zinc	E	0.0311	0.0081	100.0	99.54	ug/L	0	10	
Iron	H	0.0087	0.0076	10000	9921	ug/L	-1	10	
Selenium	H	0.0011	0.0010	100.0	101.1	ug/L	1	10	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1132546	-15.80
Scandium	A	3362294	3033864	-9.77
Scandium	E	58271	47295	-18.84
Scandium	H	830697	704776	-15.16
Germanium	H	235142	195696	-16.78
Germanium	E	41264	35309	-14.43
Indium	A	4521812	4273477	-5.49
Bismuth	A	3705169	3388846	-8.54
Yttrium	A	5027589	4760636	-5.31
Terbium	A	5812524	5706328	-1.83

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432080 File : 09i29m00080 Time : 30-SEP-2009 01:50
Cal : 1019392432001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	36.65	10.00	6.433	ug/L	ib ***
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[1.769]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1171184	-12.93
Scandium	A	3362294	3039775	-9.59
Scandium	E	58271	48071	-17.50
Scandium	H	830697	705076	-15.12
Germanium	H	235142	199605	-15.11
Germanium	E	41264	35677	-13.54
Indium	A	4521812	4369224	-3.37
Bismuth	A	3705169	3503446	-5.44
Yttrium	A	5027589	4800355	-4.52
Terbium	A	5812524	5764947	-0.82

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432083.1 File : 09i29m00083 Time : 30-SEP-2009 02:20
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2933	0.1000	ug/L	!a+
Barium	A	1.356	0.1000	ug/L	!a+
Beryllium	A	[0.02140]	0.1000	ug/L	
Cadmium	A	3.142	0.1000	ug/L	!a+
Lead	A	1.260	0.1000	ug/L	!a+
Silver	A	0.1769	0.1000	ug/L	!a+
Thallium	A	0.1022	0.05000	ug/L	!a+
Arsenic	E	0.3876	0.1000	ug/L	!a+
Chromium	E	1.220	0.1000	ug/L	!a+
Manganese	E	6.763	0.1000	ug/L	!a+
Nickel	E	4.087	0.1000	ug/L	!a+
Zinc	E	6.931	0.1000	ug/L	!a+
Selenium	H	0.2051	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107600	ug/L	108
Calcium	A	300000	326900	ug/L	109
Magnesium	A	100000	104400	ug/L	104
Molybdenum	A	2000	2120	ug/L	106
Potassium	A	100000	108600	ug/L	109
Sodium	E	250000	268200	ug/L	107
Iron	H	250000	268600	ug/L	107

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	983175	-26.91
Scandium	A	3362294	2920796	-13.13
Scandium	E	58271	46389	-20.39
Scandium	H	830697	670566	-19.28
Germanium	H	235142	182068	-22.57
Germanium	E	41264	34859	-15.52
Indium	A	4521812	3756415	-16.93
Bismuth	A	3705169	2885827	-22.11
Yttrium	A	5027589	4452538	-11.44
Terbium	A	5812524	5336672	-8.19

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432084.1 File : 09i29m00084 Time : 30-SEP-2009 02:31
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100000	ug/L	0		
Cadmium	A	100.0	105.1	ug/L	5	20	
Calcium	A	300000	303800	ug/L	1		
Magnesium	A	100000	98370	ug/L	-2		
Potassium	A	100000	102200	ug/L	2		
Silver	A	50.00	49.65	ug/L	-1	20	
Arsenic	E	100.0	105.0	ug/L	5	20	
Chromium	E	200.0	214.1	ug/L	7	20	
Manganese	E	200.0	211.0	ug/L	6	20	
Nickel	E	200.0	202.2	ug/L	1	20	
Sodium	E	250000	254100	ug/L	2		
Zinc	E	100.0	95.18	ug/L	-5	20	
Iron	H	250000	252300	ug/L	1		
Selenium	H	100.0	106.0	ug/L	6	20	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	830697	667071	-19.70
Scandium	A	3362294	2904352	-13.62
Scandium	E	58271	45344	-22.18
Germanium	H	235142	182920	-22.21
Germanium	E	41264	34249	-17.00
Indium	A	4521812	3771252	-16.60
Yttrium	A	5027589	4462191	-11.25

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432093 File : 09i29m00093 Time : 30-SEP-2009 04:02
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0044	0.0039	10000	9870	ug/L	-1	10	
Antimony	A	0.0034	0.0027	100.0	100.2	ug/L	0	10	
Barium	A	8.9E-4	7.3E-4	100.0	94.32	ug/L	-6	10	
Beryllium	A	0.0027	0.0023	100.0	101.6	ug/L	2	10	
Cadmium	A	7.0E-4	6.3E-4	100.0	97.63	ug/L	-2	10	
Calcium	A	3.4E-4	1.7E-4	10000	9847	ug/L	-2	10	
Lead	A	0.0094	0.0054	100.0	97.60	ug/L	-2	10	
Magnesium	A	0.0034	0.0029	10000	9716	ug/L	-3	10	
Potassium	A	0.0207	0.0055	10000	9955	ug/L	0	10	
Silver	A	0.0034	0.0031	100.0	101.0	ug/L	1	10	
Thallium	A	0.0071	0.0069	50.00	51.43	ug/L	3	10	
Arsenic	E	0.0060	0.0052	100.0	97.78	ug/L	-2	10	
Chromium	E	0.0498	0.0338	100.0	102.0	ug/L	2	10	
Manganese	E	0.0177	0.0141	100.0	97.92	ug/L	-2	10	
Nickel	E	0.0196	0.0169	100.0	103.4	ug/L	3	10	
Sodium	E	0.0083	0.0034	10000	10050	ug/L	1	10	
Zinc	E	0.0311	0.0079	100.0	97.16	ug/L	-3	10	
Iron	H	0.0087	0.0077	10000	10070	ug/L	1	10	
Selenium	H	0.0011	0.0010	100.0	101.1	ug/L	1	10	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1150967	-14.43
Scandium	A	3362294	2979163	-11.39
Scandium	E	58271	46188	-20.74
Scandium	H	830697	675443	-18.69
Germanium	H	235142	188912	-19.66
Germanium	E	41264	34539	-16.30
Indium	A	4521812	4203196	-7.05
Bismuth	A	3705169	3347965	-9.64
Yttrium	A	5027589	4680155	-6.91
Terbium	A	5812524	5610954	-3.47

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432095 File : 09i29m00095 Time : 30-SEP-2009 04:22
Cal : 1019392432001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	[9.293]	10.00	5.867	ug/L	!ib
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	35.81	10.00	6.433	ug/L	ib ***
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[0.9143]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1181298	-12.18
Scandium	A	3362294	2973069	-11.58
Scandium	E	58271	46011	-21.04
Scandium	H	830697	676731	-18.53
Germanium	H	235142	190644	-18.92
Germanium	E	41264	34464	-16.48
Indium	A	4521812	4273138	-5.50
Bismuth	A	3705169	3410995	-7.94
Yttrium	A	5027589	4680313	-6.91
Terbium	A	5812524	5617131	-3.36

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432106 File : 09i29m00106 Time : 30-SEP-2009 06:14
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0044	0.0038	10000	9727	ug/L	-3	10	
Antimony	A	0.0034	0.0027	100.0	101.2	ug/L	1	10	
Barium	A	8.9E-4	7.2E-4	100.0	93.69	ug/L	-6	10	
Beryllium	A	0.0027	0.0023	100.0	101.8	ug/L	2	10	
Cadmium	A	7.0E-4	6.3E-4	100.0	97.49	ug/L	-3	10	
Calcium	A	3.4E-4	1.7E-4	10000	9704	ug/L	-3	10	
Lead	A	0.0094	0.0054	100.0	97.28	ug/L	-3	10	
Magnesium	A	0.0034	0.0029	10000	9633	ug/L	-4	10	
Potassium	A	0.0207	0.0055	10000	9842	ug/L	-2	10	
Silver	A	0.0034	0.0031	100.0	100.2	ug/L	0	10	
Thallium	A	0.0071	0.0068	50.00	50.94	ug/L	2	10	
Arsenic	E	0.0060	0.0053	100.0	98.67	ug/L	-1	10	
Chromium	E	0.0498	0.0344	100.0	103.8	ug/L	4	10	
Manganese	E	0.0177	0.0142	100.0	98.88	ug/L	-1	10	
Nickel	E	0.0196	0.0173	100.0	106.0	ug/L	6	10	
Sodium	E	0.0083	0.0034	10000	10150	ug/L	2	10	
Zinc	E	0.0311	0.0080	100.0	98.91	ug/L	-1	10	
Iron	H	0.0087	0.0077	10000	10070	ug/L	1	10	
Selenium	H	0.0011	0.0010	100.0	100.9	ug/L	1	10	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1135573	-15.58
Scandium	A	3362294	2968303	-11.72
Scandium	E	58271	43918	-24.63
Scandium	H	830697	655801	-21.05
Germanium	H	235142	184917	-21.36
Germanium	E	41264	33343	-19.20
Indium	A	4521812	4149404	-8.24
Bismuth	A	3705169	3349726	-9.59
Yttrium	A	5027589	4643801	-7.63
Terbium	A	5812524	5565341	-4.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432108 File : 09i29m00108 Time : 30-SEP-2009 06:34
Cal : 1019392432001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	37.31	10.00	6.433	ug/L	ib ***
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1160298	-13.74
Scandium	A	3362294	2935632	-12.69
Scandium	E	58271	44209	-24.13
Scandium	H	830697	653038	-21.39
Germanium	H	235142	185871	-20.95
Germanium	E	41264	33160	-19.64
Indium	A	4521812	4255525	-5.89
Bismuth	A	3705169	3406533	-8.06
Yttrium	A	5027589	4650984	-7.49
Terbium	A	5812524	5552934	-4.47

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432150 File : 09i29m00150 Time : 30-SEP-2009 13:40
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3161	0.1000	ug/L	!a+
Barium	A	1.400	0.1000	ug/L	!a+
Beryllium	A	[0.009200]	0.1000	ug/L	
Cadmium	A	3.262	0.1000	ug/L	!a+
Lead	A	1.255	0.1000	ug/L	!a+
Silver	A	0.1994	0.1000	ug/L	!a+
Thallium	A	0.07760	0.05000	ug/L	!a+
Arsenic	E	0.3628	0.1000	ug/L	!a+
Chromium	E	1.212	0.1000	ug/L	!a+
Manganese	E	6.845	0.1000	ug/L	!a+
Nickel	E	4.142	0.1000	ug/L	!a+
Zinc	E	6.979	0.1000	ug/L	!a+
Selenium	H	0.1844	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	111200	ug/L	111
Calcium	A	300000	331600	ug/L	111
Magnesium	A	100000	108700	ug/L	109
Molybdenum	A	2000	2114	ug/L	106
Potassium	A	100000	110400	ug/L	110
Sodium	E	250000	273100	ug/L	109
Iron	H	250000	271100	ug/L	108

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1345098	1001765	-25.52
Scandium	A	3362294	2689686	-20.00
Scandium	E	58271	41396	-28.96
Scandium	H	830697	602887	-27.42
Germanium	H	235142	165214	-29.74
Germanium	E	41264	31585	-23.46
Indium	A	4521812	3573841	-20.96
Bismuth	A	3705169	2697279	-27.20
Yttrium	A	5027589	4222704	-16.01
Terbium	A	5812524	5056017	-13.02

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019392432151 File : 09i29m00151 Time : 30-SEP-2009 13:50
Cal : 1019392432001 Caldate : 29-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103300	ug/L	3		
Cadmium	A	100.0	104.8	ug/L	5	20	
Calcium	A	300000	306700	ug/L	2		
Magnesium	A	100000	101100	ug/L	1		
Potassium	A	100000	102900	ug/L	3		
Silver	A	50.00	49.31	ug/L	-1	20	
Arsenic	E	100.0	105.0	ug/L	5	20	
Chromium	E	200.0	213.5	ug/L	7	20	
Manganese	E	200.0	213.0	ug/L	7	20	
Nickel	E	200.0	202.5	ug/L	1	20	
Sodium	E	250000	255900	ug/L	2		
Zinc	E	100.0	96.22	ug/L	-4	20	
Iron	H	250000	255600	ug/L	2		
Selenium	H	100.0	105.9	ug/L	6	20	

ISTD (ICALBLK 09i29m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	830697	598593	-27.94
Scandium	A	3362294	2659585	-20.90
Scandium	E	58271	40477	-30.54
Germanium	H	235142	166913	-29.02
Germanium	E	41264	30809	-25.34
Indium	A	4521812	3559572	-21.28
Yttrium	A	5027589	4181881	-16.82

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899392491

Instrument : MET16 Begun : 09/29/09 13:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09i29n00001	TUN				09/29/09 13:31	1.0	1	
002	09i29n00002	X	RINSE			09/29/09 13:37	1.0	2	
003	09i29n00003	ICALBLK	CALBLANK			09/29/09 13:47	1.0	2	
004	09i29n00004	ICAL				09/29/09 13:58	1.0	3 2	
005	09i29n00005	ICAL				09/29/09 14:08	1.0	4 2	
006	09i29n00006	ICAL				09/29/09 14:19	1.0	5 2	
007	09i29n00007	ICAL				09/29/09 14:29	1.0	6 2	
008	09i29n00008	ICAL				09/29/09 14:40	1.0	7 2	
009	09i29n00009	ICAL				09/29/09 14:50	1.0	8 2	
010	09i29n00010	ICV				09/29/09 15:00	1.0	9 2	
011	09i29n00011	X				09/29/09 15:11	1.0	2	
012	09i29n00012	ICB				09/29/09 15:21	1.0	2	
013	09i29n00013	X				09/29/09 15:33	1.0	2	
014	09i29n00014	ICSA				09/29/09 15:44	1.0	10 2	7:CA=330000
015	09i29n00015	ICSAB				09/29/09 15:54	1.0	11 2	11:CA=320000
016	09i29n00016	X	RINSE			09/29/09 16:05	1.0	2	
017	09i29n00017	X	RINSE			09/29/09 16:16	1.0	2	
018	09i29n00018	MSS	215138-001	Filtrate	155342	09/29/09 16:26	50.0	2	
019	09i29n00019	MS	QC513792	Filtrate	155342	09/29/09 16:37	5.0	2	2:NA=46000
020	09i29n00020	MSD	QC513793	Filtrate	155342	09/29/09 16:47	5.0	2	2:NA=45000
021	09i29n00021	SAMPLE	215138-013	Filtrate	155342	09/29/09 16:57	5.0	2	1:NA=48000
022	09i29n00022	SAMPLE	215138-014	Filtrate	155342	09/29/09 17:08	5.0	2	1:NA=88000
023	09i29n00023	CCV				09/29/09 17:18	1.0	12 2	
024	09i29n00024	X				09/29/09 17:29	1.0	2	
025	09i29n00025	CCB				09/29/09 17:39	1.0	2	
026	09i29n00026	MSS	215138-001	Water	155341	09/29/09 17:50	50.0	2	
027	09i29n00027	SAMPLE	215138-013	Water	155341	09/29/09 18:00	50.0	2	
028	09i29n00028	SAMPLE	215138-014	Water	155341	09/29/09 18:11	50.0	2	
029	09i29n00029	SAMPLE	215138-002	Water	155341	09/29/09 18:21	100.0	2	
030	09i29n00030	SAMPLE	215138-003	Water	155341	09/29/09 18:32	250.0	2	
031	09i29n00031	SAMPLE	215138-004	Water	155341	09/29/09 18:43	100.0	2	
032	09i29n00032	SAMPLE	215138-005	Water	155341	09/29/09 18:53	250.0	2	
033	09i29n00033	SAMPLE	215138-006	Water	155341	09/29/09 19:04	100.0	2	
034	09i29n00034	SAMPLE	215138-007	Water	155341	09/29/09 19:14	250.0	2	
035	09i29n00035	SAMPLE	215138-008	Water	155341	09/29/09 19:25	100.0	2	
036	09i29n00036	CCV				09/29/09 19:35	1.0	12 2	
037	09i29n00037	CCB				09/29/09 19:46	1.0	2	
038	09i29n00038	SAMPLE	215138-009	Water	155341	09/29/09 19:56	100.0	2	
039	09i29n00039	SAMPLE	215138-010	Water	155341	09/29/09 20:07	250.0	2	
040	09i29n00040	SAMPLE	215138-011	Water	155341	09/29/09 20:17	250.0	2	
041	09i29n00041	SAMPLE	215138-012	Water	155341	09/29/09 20:28	250.0	2	
042	09i29n00042	SAMPLE	215138-015	Water	155341	09/29/09 20:38	100.0	2	
043	09i29n00043	SAMPLE	215138-016	Water	155341	09/29/09 20:49	100.0	2	
044	09i29n00044	CCV				09/29/09 21:00	1.0	12 2	
045	09i29n00045	CCB				09/29/09 21:10	1.0	2	
046	09i29n00046	SAMPLE	215138-002	Water	155341	09/29/09 21:20	10.0	2	1:NA=95000
047	09i29n00047	SAMPLE	215138-003	Water	155341	09/29/09 21:31	10.0	2	2:NA=180000
048	09i29n00048	SAMPLE	215138-004	Water	155341	09/29/09 21:41	10.0	2	1:NA=61000
049	09i29n00049	SAMPLE	215138-005	Water	155341	09/29/09 21:52	10.0	2	2:NA=100000
050	09i29n00050	SAMPLE	215138-006	Water	155341	09/29/09 22:02	10.0	2	1:NA=63000
051	09i29n00051	SAMPLE	215138-007	Water	155341	09/29/09 22:13	10.0	2	1:NA=280000
052	09i29n00052	SAMPLE	215138-008	Water	155341	09/29/09 22:23	10.0	2	1:NA=45000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899392491

Instrument : MET16 Begun : 09/29/09 13:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09i29n00053	SAMPLE	215138-009	Water	155341	09/29/09 22:34	10.0	2	1:NA=42000
054	09i29n00054	SAMPLE	215138-010	Water	155341	09/29/09 22:44	10.0	2	1:NA=64000
055	09i29n00055	SAMPLE	215138-011	Water	155341	09/29/09 22:55	10.0	2	1:NA=300000
056	09i29n00056	CCV				09/29/09 23:05	1.0	12 2	
057	09i29n00057	CCB				09/29/09 23:16	1.0	2	
058	09i29n00058	SAMPLE	215138-012	Water	155341	09/29/09 23:26	10.0	2	1:NA=310000
059	09i29n00059	SAMPLE	215138-015	Water	155341	09/29/09 23:37	10.0	2	
060	09i29n00060	SAMPLE	215138-016	Water	155341	09/29/09 23:47	10.0	2	
061	09i29n00061	CCV				09/29/09 23:58	1.0	12 2	
062	09i29n00062	TUN				09/30/09 00:09	1.0	1	
063	09i29n00063	X	RINSE			09/30/09 00:15	1.0	2	
064	09i29n00064	CCB				09/30/09 00:25	1.0	2	
065	09i29n00065	ICSA				09/30/09 00:36	1.0	10 2	7:CA=330000
066	09i29n00066	ICSAB				09/30/09 00:47	1.0	11 2	11:CA=320000
067	09i29n00067	X	RINSE			09/30/09 00:57	1.0	2	
068	09i29n00068	X	RINSE			09/30/09 01:08	1.0	2	
069	09i29n00069	BLANK	QC514185	Air	155435	09/30/09 01:18	5.0	2	
070	09i29n00070	BS	QC514186	Air	155435	09/30/09 01:29	10.0	2	
071	09i29n00071	BSD	QC514187	Air	155435	09/30/09 01:39	10.0	2	
072	09i29n00072	SAMPLE	215186-001	Air	155435	09/30/09 01:50	5.0	2	
073	09i29n00073	SAMPLE	215186-002	Air	155435	09/30/09 02:00	5.0	2	
074	09i29n00074	SAMPLE	215186-003	Air	155435	09/30/09 02:11	5.0	2	
075	09i29n00075	SAMPLE	215186-004	Air	155435	09/30/09 02:21	5.0	2	
076	09i29n00076	SAMPLE	215186-005	Air	155435	09/30/09 02:32	5.0	2	
077	09i29n00077	CCV				09/30/09 02:42	1.0	12 2	
078	09i29n00078	CCB				09/30/09 02:53	1.0	2	
079	09i29n00079	SAMPLE	215186-006	Air	155435	09/30/09 03:03	5.0	2	
080	09i29n00080	SAMPLE	215186-007	Air	155435	09/30/09 03:14	5.0	2	
081	09i29n00081	SAMPLE	215186-008	Air	155435	09/30/09 03:24	5.0	2	
082	09i29n00082	SAMPLE	215186-009	Air	155435	09/30/09 03:35	5.0	2	
083	09i29n00083	SAMPLE	215186-010	Air	155435	09/30/09 03:46	5.0	2	
084	09i29n00084	SAMPLE	215186-011	Air	155435	09/30/09 03:56	5.0	2	
085	09i29n00085	SAMPLE	215186-012	Air	155435	09/30/09 04:07	5.0	2	
086	09i29n00086	SAMPLE	215186-013	Air	155435	09/30/09 04:17	5.0	2	
087	09i29n00087	SAMPLE	215186-014	Air	155435	09/30/09 04:28	5.0	2	
088	09i29n00088	SAMPLE	215186-015	Air	155435	09/30/09 04:38	5.0	2	
089	09i29n00089	CCV				09/30/09 04:49	1.0	12 2	
090	09i29n00090	CCB				09/30/09 04:59	1.0	2	
091	09i29n00091	SAMPLE	215186-016	Air	155435	09/30/09 05:10	5.0	2	
092	09i29n00092	SAMPLE	215186-017	Air	155435	09/30/09 05:20	5.0	2	
093	09i29n00093	SAMPLE	215186-018	Air	155435	09/30/09 05:31	5.0	2	
094	09i29n00094	SAMPLE	215186-019	Air	155435	09/30/09 05:41	5.0	2	
095	09i29n00095	SAMPLE	215186-020	Air	155435	09/30/09 05:52	5.0	2	
096	09i29n00096	CCV				09/30/09 06:02	1.0	12 2	
097	09i29n00097	CCB				09/30/09 06:13	1.0	2	
098	09i29n00098	BLANK	QC514082	Water	155412	09/30/09 06:23	5.0	2	
099	09i29n00099	BS	QC514083	Water	155412	09/30/09 06:34	5.0	2	
100	09i29n00100	BSD	QC514084	Water	155412	09/30/09 06:44	5.0	2	
101	09i29n00101	MSS	215203-002	Water	155412	09/30/09 06:55	5.0	2	4:NA=56000
102	09i29n00102	MS	QC514085	Water	155412	09/30/09 07:05	5.0	2	
103	09i29n00103	MSD	QC514086	Water	155412	09/30/09 07:16	5.0	2	
104	09i29n00104	SAMPLE	215203-011	Water	155412	09/30/09 07:26	5.0	2	4:NA=140000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899392491

Instrument : MET16 Begun : 09/29/09 13:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09i29n00105	SAMPLE	215203-014	Water	155412	09/30/09 07:37	5.0	2	4:NA=53000
106	09i29n00106	CCV				09/30/09 07:47	1.0	12 2	
107	09i29n00107	CCB				09/30/09 07:58	1.0	2	
108	09i29n00108	ICSA				09/30/09 08:08	1.0	10 2	7:CA=330000
109	09i29n00109	ICSAB				09/30/09 08:19	1.0	11 2	11:CA=320000
110	09i29n00110	X	RINSE			09/30/09 08:29	1.0	2	
111	09i29n00111	X	RINSE			09/30/09 08:40	1.0	2	
112	09i29n00112	CCV				09/30/09 08:50	1.0	12 2	
113	09i29n00113	X				09/30/09 09:01	1.0	2	
114	09i29n00114	CCB				09/30/09 09:12	1.0	2	
115	09i29n00115	TUN				09/30/09 09:24	1.0	1	
116	09i29n00116	X	RINSE			09/30/09 09:30	1.0	2	
117	09i29n00117	BLANK	QC514072	Water	155410	09/30/09 09:40	5.0	2	
118	09i29n00118	BS	QC514073	Water	155410	09/30/09 09:51	5.0	2	
119	09i29n00119	BSD	QC514074	Water	155410	09/30/09 10:01	5.0	2	
120	09i29n00120	MSS	215210-001	Water	155410	09/30/09 10:12	5.0	2	
121	09i29n00121	MS	QC514075	Water	155410	09/30/09 10:22	5.0	2	1:NA=21000
122	09i29n00122	MSD	QC514076	Water	155410	09/30/09 10:32	5.0	2	1:NA=21000
123	09i29n00123	SAMPLE	215210-002	Water	155410	09/30/09 10:43	5.0	2	1:NA=55000
124	09i29n00124	SAMPLE	215210-003	Water	155410	09/30/09 10:53	5.0	2	1:NA=79000
125	09i29n00125	SAMPLE	215210-004	Water	155410	09/30/09 11:04	5.0	2	1:NA=35000
126	09i29n00126	SAMPLE	215210-005	Water	155410	09/30/09 11:14	5.0	2	1:NA=37000
127	09i29n00127	CCV				09/30/09 11:25	1.0	12 2	
128	09i29n00128	CCB				09/30/09 11:35	1.0	2	
129	09i29n00129	X				09/30/09 11:46	1.0	2	
130	09i29n00130	MSS	215166-001	Water	155362	09/30/09 11:56	50.0	2	
131	09i29n00131	SAMPLE	215166-002	Water	155362	09/30/09 12:06	50.0	2	
132	09i29n00132	SAMPLE	215166-003	Water	155362	09/30/09 12:17	50.0	2	
133	09i29n00133	SAMPLE	215166-004	Water	155362	09/30/09 12:27	50.0	2	
134	09i29n00134	SAMPLE	215166-005	Water	155362	09/30/09 12:38	50.0	2	
135	09i29n00135	SAMPLE	215166-006	Water	155362	09/30/09 12:48	50.0	2	
136	09i29n00136	SAMPLE	215166-007	Water	155362	09/30/09 12:59	50.0	2	
137	09i29n00137	SAMPLE	215166-008	Water	155362	09/30/09 13:09	50.0	2	
138	09i29n00138	SAMPLE	215166-009	Water	155362	09/30/09 13:20	50.0	2	
139	09i29n00139	SAMPLE	215166-011	Water	155362	09/30/09 13:31	100.0	2	
140	09i29n00140	CCV				09/30/09 13:41	1.0	12 2	
141	09i29n00141	X				09/30/09 13:52	1.0	2	
142	09i29n00142	CCB				09/30/09 14:02	1.0	2	
143	09i29n00143	SAMPLE	215166-012	Water	155362	09/30/09 14:10	50.0	2	
144	09i29n00144	SAMPLE	215166-013	Water	155362	09/30/09 14:21	50.0	2	
145	09i29n00145	SAMPLE	215166-014	Water	155362	09/30/09 14:31	50.0	2	
146	09i29n00146	SAMPLE	215166-015	Water	155362	09/30/09 14:42	50.0	2	
147	09i29n00147	CCV				09/30/09 14:52	1.0	12 2	
148	09i29n00148	CCB				09/30/09 15:03	1.0	2	
149	09i29n00149	CCB				09/30/09 15:13	1.0	2	
150	09i29n00150	SAMPLE	215210-006	Water	155410	09/30/09 15:23	5.0	2	1:NA=32000
151	09i29n00151	SAMPLE	215210-007	Water	155410	09/30/09 15:34	5.0	2	1:NA=33000
152	09i29n00152	SAMPLE	215210-008	Water	155410	09/30/09 15:44	5.0	2	
153	09i29n00153	SAMPLE	215210-010	Water	155410	09/30/09 15:55	5.0	2	1:NA=31000
154	09i29n00154	SAMPLE	215210-011	Water	155410	09/30/09 16:05	50.0	2	1:NA=140000
155	09i29n00155	SAMPLE	215210-012	Water	155410	09/30/09 16:16	5.0	2	1:NA=28000
156	09i29n00156	SAMPLE	215210-013	Water	155410	09/30/09 16:27	5.0	2	1:NA=30000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899392491

Instrument : MET16 Begun : 09/29/09 13:31
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	09i29n00157	SAMPLE	215210-014	Water	155410	09/30/09 16:37	5.0	2	
158	09i29n00158	SAMPLE	215210-015	Water	155410	09/30/09 16:48	5.0	2	1:NA=24000
159	09i29n00159	SAMPLE	215210-016	Water	155410	09/30/09 16:58	5.0	2	
160	09i29n00160	CCV				09/30/09 17:09	1.0	12 2	
161	09i29n00161	CCB				09/30/09 17:19	1.0	2	
162	09i29n00162	SAMPLE	215210-017	Water	155410	09/30/09 17:30	5.0	2	
163	09i29n00163	SAMPLE	215210-018	Water	155410	09/30/09 17:40	5.0	2	1:NA=25000
164	09i29n00164	SAMPLE	215210-019	Water	155410	09/30/09 17:51	5.0	2	1:NA=31000
165	09i29n00165	SAMPLE	215210-020	Water	155410	09/30/09 18:01	5.0	2	1:NA=50000
166	09i29n00166	SAMPLE	215210-021	Water	155410	09/30/09 18:12	5.0	2	1:NA=34000
167	09i29n00167	CCV				09/30/09 18:23	1.0	12 2	
168	09i29n00168	CCV				09/30/09 18:33	1.0	12 2	
169	09i29n00169	CCB				09/30/09 18:43	1.0	2	
170	09i29n00170	BLANK	QC514325	Water	155468	09/30/09 18:54	5.0	2	
171	09i29n00171	BS	QC514326	Water	155468	09/30/09 19:04	5.0	2	
172	09i29n00172	BSD	QC514327	Water	155468	09/30/09 19:15	5.0	2	
173	09i29n00173	MSS	215138-013	Water	155468	09/30/09 19:26	5.0	2	1:NA=42000
174	09i29n00174	MS	QC514328	Water	155468	09/30/09 19:36	5.0	2	
175	09i29n00175	MSD	QC514329	Water	155468	09/30/09 19:46	5.0	2	
176	09i29n00176	SAMPLE	215138-014	Water	155468	09/30/09 19:57	5.0	2	1:NA=83000
177	09i29n00177	CCV				09/30/09 20:08	1.0	12 2	
178	09i29n00178	CCB				09/30/09 20:18	1.0	2	
179	09i29n00179	ICSA				09/30/09 20:29	1.0	10 2	7:CA=330000
180	09i29n00180	ICSAB				09/30/09 20:39	1.0	11 2	11:CA=320000
181	09i29n00181	X	RINSE			09/30/09 20:50	1.0	2	
182	09i29n00182	X	RINSE			09/30/09 21:00	1.0	2	
183	09i29n00183	TUN				09/30/09 21:12	1.0	1	
184	09i29n00184	X	RINSE			09/30/09 21:18	1.0	2	
185	09i29n00185	CCV				09/30/09 21:28	1.0	12 2	
186	09i29n00186	CCB				09/30/09 21:39	1.0	2	
187	09i29n00187	CCB				09/30/09 21:49	1.0	2	
188	09i29n00188	BLANK	QC513667	Water	155316	09/30/09 22:00	5.0	2	
189	09i29n00189	BS	QC513668	Water	155316	09/30/09 22:10	5.0	2	
190	09i29n00190	BSD	QC513669	Water	155316	09/30/09 22:21	5.0	2	
191	09i29n00191	MSS	215072-005	Water	155316	09/30/09 22:31	50.0	2	
192	09i29n00192	SER	QC513673	Water	155316	09/30/09 22:42	250.0	2	
193	09i29n00193	MS	QC513670	Water	155316	09/30/09 22:53	50.0	2	
194	09i29n00194	MSD	QC513671	Water	155316	09/30/09 23:03	50.0	2	
195	09i29n00195	PDS	QC513672	Water	155316	09/30/09 23:14	50.0	13 14 2	
196	09i29n00196	SAMPLE	215072-010	Water	155316	09/30/09 23:24	50.0	2	
197	09i29n00197	SAMPLE	215072-011	Water	155316	09/30/09 23:35	50.0	2	
198	09i29n00198	CCV				09/30/09 23:45	1.0	12 2	
199	09i29n00199	CCB				09/30/09 23:56	1.0	2	
200	09i29n00200	ICSA				10/01/09 00:06	1.0	10 2	7:CA=330000
201	09i29n00201	ICSAB				10/01/09 00:17	1.0	11 2	11:CA=310000
202	09i29n00202	X	RINSE			10/01/09 00:28	1.0	2	
203	09i29n00203	X	RINSE			10/01/09 00:38	1.0	2	
204	09i29n00204	X	RINSE			10/01/09 00:49	1.0	2	

JYF 10/01/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 201.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899392491

Instrument : MET16 Begun : 09/29/09 13:31
Method : EPA 6020 SOP Version : icpms_rv5

Standards used: 1=S12846 2=S12847 3=S12854 4=S12855 5=S12856 6=S12857 7=S12852 8=S12853 9=S12850 10=S12848 11=S12849 12=S12851 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899392491

Date : 09/29/09 Reference : 09i29n00003
Sequence : MET16 09i29n00 Analyzed : 09/29/09 13:47

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2200929	1288067	34809	370865	76906	18451	1716311	2174128	1593883	2862702
		LOWER LIMIT	660279	386420	10443	111260	23072	5535	514893	652238	478165	858811
		UPPER LIMIT	2641115	1545680	41771	445038	92287	22141	2059573	2608954	1912660	3435242
012	ICB		2303125	1320371	37869	380587	79680	19815	1710305	2080148	1592172	2824462
014	ICSA		1845862	1205336	39676	389849	73462	19465	1471243	1706187	1480813	2665322
015	ICSAB		1783071	1167049	36943	359932	70794	18367	1474876	1742459	1476835	2681999
018	MSS	215138-001	2022574	1195147	34643	344141	75034	19178	1678016	2151033	1556644	2849121
019	MS	QC513792	2118476	1302922	36826	369518	77978	19682	1698525	2057020	1605855	2909060
020	MSD	QC513793	2165013	1337346	37471	369130	77813	19827	1730184	2087256	1644562	2952119
021	SAMPLE	215138-013	2211160	1339719	38109	366840	77900	20132	1715119	2062522	1642076	2901485
022	SAMPLE	215138-014	2193645	1349468	38435	370096	78015	20136	1726096	2037533	1652573	2907690
023	CCV		2163741	1309602	38027	369779	77623	19908	1710415	2099884	1637561	2927698
025	CCB		2178939	1268095	36676	356973	76192	19555	1703262	2123478	1589873	2843536
026	MSS	215138-001	2147920	1259808	35653	358282	77067	19373	1694804	2120957	1566161	2844674
027	SAMPLE	215138-013	2173164	1271050	36003	360425	77376	19354	1690663	2116349	1579265	2855437
028	SAMPLE	215138-014	2012721	1173053	36228	361758	77374	19391	1561657	1957246	1456900	2638966
029	SAMPLE	215138-002	2173748	1268326	36623	364767	77812	19773	1692244	2112852	1579829	2829073
030	SAMPLE	215138-003	2171440	1270286	36692	361807	77440	19871	1699772	2128219	1579858	2839135
031	SAMPLE	215138-004	2164830	1269778	36489	361961	77637	19619	1706268	2154524	1579083	2856841
032	SAMPLE	215138-005	2180604	1273000	36866	362735	77786	19901	1706087	2162022	1593650	2877702
033	SAMPLE	215138-006	2231527	1300047	37572	366340	78143	20233	1732484	2195868	1618825	2927937
034	SAMPLE	215138-007	2212935	1319286	37846	365786	78017	20374	1747381	2161287	1632561	2918628
035	SAMPLE	215138-008	2197944	1315370	38069	368220	79261	20320	1749434	2206948	1624946	2929178
036	CCV		2288929	1390064	39833	377085	78545	20918	1745608	2117307	1678028	2960043
037	CCB		2294631	1359989	39365	370408	78820	21066	1796786	2219104	1678736	2983861
038	SAMPLE	215138-009	2234666	1316293	37814	366590	78446	20582	1760084	2210327	1630170	2910991
039	SAMPLE	215138-010	2221479	1325407	38375	367103	78706	20880	1752483	2187826	1638116	2944188
040	SAMPLE	215138-011	2252132	1338481	38901	368400	79412	20922	1778346	2177733	1661351	2944383
041	SAMPLE	215138-012	2252979	1356857	38897	369972	79845	20914	1787175	2182844	1670587	2974080
042	SAMPLE	215138-015	2250297	1328704	38405	367774	78937	20888	1778603	2216472	1651198	2980095
043	SAMPLE	215138-016	2238893	1332941	38363	365441	78103	20631	1760797	2187430	1652408	2960843
044	CCV		2307417	1438264	41275	382823	79326	21760	1786010	2134104	1723869	3005839
045	CCB		2337151	1383999	39965	371470	79114	21221	1804049	2217016	1702495	2990998
046	SAMPLE	215138-002	2233660	1393997	39756	373240	78165	20904	1777916	2108901	1688901	2991038
047	SAMPLE	215138-003	2220408	1385291	41060	376050	78486	21467	1755009	2043622	1706659	2986128
048	SAMPLE	215138-004	2208422	1334649	35263	358834	77461	19068	1773869	2167941	1660481	3013277
049	SAMPLE	215138-005	2181076	1343802	39203	360778	76052	20812	1740949	2104052	1666857	2991292
050	SAMPLE	215138-006	2211323	1349514	37891	358311	76239	20708	1770207	2148230	1682747	3010444
051	SAMPLE	215138-007	2191300	1378205	40878	372656	76843	21064	1702514	1965019	1697408	2920775
052	SAMPLE	215138-008	2138593	1296389	37147	385633	80358	20231	1763260	2178236	1637808	2988790
053	SAMPLE	215138-009	2181858	1305323	37503	336364	72464	20408	1760882	2188274	1647125	2997837
054	SAMPLE	215138-010	2198308	1334197	37787	346594	73436	20191	1741113	2119534	1650632	2988170
055	SAMPLE	215138-011	2081743	1307790	39455	360522	73915	20193	1670027	1972675	1617249	2875213
056	CCV		2174577	1333097	36990	341930	72273	19910	1762093	2183022	1683525	3035703
057	CCB		2221490	1300333	36103	336297	72657	19746	1786134	2241444	1648841	2994410
058	SAMPLE	215138-012	2121386	1322382	38934	356688	73484	20125	1699039	1983668	1640078	2900828
059	SAMPLE	215138-015	2107647	1269019	35015	324059	69864	19229	1756670	2225954	1613387	2986591
060	SAMPLE	215138-016	2174420	1251394	35433	322947	70020	19131	1744429	2212826	1622671	2953261
061	CCV		2239528	1344750	37728	340263	71430	19823	1743674	2147981	1664290	2968578
064	CCB		2278586	1336135	36921	332230	71532	19794	1805124	2234242	1680135	2995805
065	ICSA		1829689	1227160	39813	348906	66698	19940	1558157	1830463	1558399	2818517

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899392491

Date : 09/29/09 Reference : 09i29n00003
Sequence : MET16 09i29n00 Analyzed : 09/29/09 13:47

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
066	ICSAB		1800363	1208531	37585	319777	63797	19315	1565968	1855738	1574578	2877174
069	BLANK	QC514185	2182335	1338630	36285	311043	67803	20086	1867201	2301524	1755849	3146110
070	BS	QC514186	2179125	1321810	35995	315099	68308	19785	1832761	2276087	1713724	3092500
071	BSD	QC514187	2203427	1329749	36436	319712	69316	20035	1843203	2257268	1716276	3095252
072	SAMPLE	215186-001	2314274	1420247	36907	326046	70214	20493	1957266	2412776	1818286	3241850
073	SAMPLE	215186-002	2239373	1346259	36736	323198	69521	20104	1868343	2318640	1736836	3106710
074	SAMPLE	215186-003	2264416	1367603	36643	321557	69705	20153	1874421	2332870	1740820	3113803
075	SAMPLE	215186-004	2304123	1373685	37123	326261	70085	20515	1896725	2337341	1773827	3132860
076	SAMPLE	215186-005	2296037	1371925	37127	330103	71220	20462	1885875	2347775	1741269	3145950
077	CCV		2317269	1442978	38651	331736	70344	20871	1850640	2218077	1799788	3145314
078	CCB		2277301	1377893	37884	325669	71005	20921	1887976	2304713	1746248	3159172
079	SAMPLE	215186-006	2312813	1406901	38443	334984	72300	21018	1921975	2378677	1799405	3174416
080	SAMPLE	215186-007	2295573	1402634	38079	334701	72122	20797	1920753	2361262	1811003	3183831
081	SAMPLE	215186-008	2299115	1406723	38093	334668	72148	20790	1923744	2374932	1799391	3176287
082	SAMPLE	215186-009	2321024	1402537	38159	335987	72185	20693	1935763	2377403	1796924	3184639
083	SAMPLE	215186-010	2325245	1412412	38090	336317	72421	21040	1933517	2374189	1820428	3224607
084	SAMPLE	215186-011	2324722	1407774	38385	335100	72516	21116	1927882	2382934	1797388	3206896
085	SAMPLE	215186-012	2328693	1414685	38569	337562	72756	21204	1942428	2376994	1823888	3206870
086	SAMPLE	215186-013	2313026	1418882	38449	337327	73046	21195	1948140	2397996	1830762	3205071
087	SAMPLE	215186-014	2327629	1421611	39054	341302	73756	21522	1961670	2396453	1822555	3227303
088	SAMPLE	215186-015	2371342	1443671	39118	389255	83742	21614	1960528	2403904	1835981	3221115
089	CCV		2336236	1489771	40369	396806	84093	22010	1918729	2269270	1857003	3209576
090	CCB		2350047	1441076	40038	390640	84717	22071	1969559	2363512	1854223	3226569
091	SAMPLE	215186-016	2361804	1484033	40673	403745	87196	22311 *	2020800	2457735	1895703	3315593
092	SAMPLE	215186-017	2346788	1449333	39323	396751	85938	21594	1994838	2425365	1863727	3260793
093	SAMPLE	215186-018	2321488	1436781	39211	397069	85853	21501	1988631	2423498	1853999	3273730
094	SAMPLE	215186-019	2331183	1439335	39742	397188	85824	21915	1956460	2412809	1834894	3243781
095	SAMPLE	215186-020	2341375	1449444	39742	396666	85638	21741	1987576	2429877	1856705	3259193
096	CCV		2332149	1485133	40766	400421	84759	22201 *	1912362	2271508	1861091	3184121
097	CCB		2367944	1467201	39027	387966	83690	21770	2000371	2379225	1875058	3229886
098	BLANK	QC514082	2312765	1449097	39884	390253	84264	21778	1976351	2384364	1859787	3234156
099	BS	QC514083	2349790	1477119	40113	387721	83286	21956	1968023	2358141	1863521	3251053
100	BSD	QC514084	2348297	1491502	40681	332363	72280	22330 *	1995518	2381395	1880988	3286292
102	MS	QC514085	2282775	1467837	39810	388006	82107	21630	1896980	2183182	1838038	3181328
103	MSD	QC514086	2284720	1475601	40008	382341	81333	21764	1917789	2209633	1853134	3195883
106	CCV		2254360	1440201	38000	369914	78779	20823	1898135	2259422	1828909	3190540
107	CCB		2288959	1385390	36525	356191	77987	20211	1910677	2296691	1783932	3110133
108	ICSA		1897483	1315192	39175	372892	72618	20053	1674220	1894544	1699682	2963171
109	ICSAB		1864330	1289019	37036	353488	70982	19358	1683267	1905989	1695440	2985158
112	CCV		2218871	1446537	36911	345251	75686	20361	1945464	2265353	1875218	3250154
114	CCB		2241450	1419956	36080	346287	76503	20536	1987378	2369840	1861896	3232322
117	BLANK	QC514072	2099614	1332228	34437	325333	74778	20374	1913469	2379879	1758578	3194651
118	BS	QC514073	2081243	1323568	33651	328075	73794	19958	1868628	2311169	1755966	3187467
119	BSD	QC514074	2083038	1316132	34113	329003	74740	19959	1858710	2310038	1752621	3183393
120	MSS	215210-001	2053307	1318647	34056	341483	78370	20276	1841737	2282098	1738604	3166840
123	SAMPLE	215210-002	2145603	1396654	35331	337773	77311	20648	1907165	2245769	1823138	3233012
124	SAMPLE	215210-003	2131433	1364369	35391	341795	77034	20631	1861169	2224977	1778169	3178789
125	SAMPLE	215210-004	2054748	1301787	33593	329869	75159	19585	1824574	2201870	1707844	3109480
126	SAMPLE	215210-005	2122321	1345113	33481	327388	75291	19700	1875800	2270899	1756622	3196380
127	CCV		2266869	1470198	37137	367317	78401	20652	1955913	2290473	1878463	3230993
128	CCB		2316715	1434660	36081	358214	79090	20466	1970723	2343376	1856523	3201857
130	MSS	215166-001	2257276	1404227	35768	361486	79743	20274	1923487	2303440	1794915	3146190

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899392491

Date : 09/29/09 Reference : 09i29n00003
Sequence : MET16 09i29n00 Analyzed : 09/29/09 13:47

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
131	SAMPLE	215166-002	2242654	1418035	35507	358690	79339	20123	1936854	2315164	1809907	3157867
132	SAMPLE	215166-003	2273283	1404513	35235	360647	79992	20120	1923603	2325373	1796578	3143019
133	SAMPLE	215166-004	2283584	1424564	35580	360296	79832	20460	1930799	2310024	1812979	3188263
134	SAMPLE	215166-005	2256309	1401601	35441	357583	79370	20161	1914672	2307507	1789634	3124522
135	SAMPLE	215166-006	2261882	1413156	35565	361302	80031	20218	1924588	2308687	1814439	3179702
136	SAMPLE	215166-007	2246563	1400899	35536	360198	79677	20003	1915846	2307872	1795532	3153879
137	SAMPLE	215166-008	2272366	1395099	35370	360290	80113	20201	1906744	2322549	1787421	3160494
138	SAMPLE	215166-009	2227552	1371603	36352	364160	80647	20504	1872875	2269452	1758783	3066067
139	SAMPLE	215166-011	2272303	1411131	36016	365064	80654	20269	1914484	2336778	1805397	3148020
140	CCV		2319414	1490417	38090	373369	79919	20777	1938120	2256397	1863712	3201057
142	CCB		2333165	1439127	37341	372470	81457	20763	1956824	2334311	1842353	3187202
143	SAMPLE	215166-012	2222795	1378374	36340	366701	81174	20309	1890659	2260316	1758821	3058930
144	SAMPLE	215166-013	2261318	1409912	35993	370251	82093	20359	1914024	2306215	1808220	3148232
145	SAMPLE	215166-014	2295534	1426815	36096	375630	82933	20493	1946492	2322271	1821366	3185844
146	SAMPLE	215166-015	2279689	1417766	36449	369648	82019	20716	1919858	2296721	1804406	3121537
147	CCV		2353721	1502785	38724	384484	82448	21231	1918465	2223958	1850949	3162788
148	CCB		2368933	1466636	38116	373701	82278	20998	1968141	2334291	1866651	3193679
149	CCB		2357400	1434539	36586	368378	81142	20404	1951788	2312011	1826106	3148646
150	SAMPLE	215210-006	2114059	1333120	34810	348136	79850	20330	1797463	2194130	1699766	3060714
151	SAMPLE	215210-007	2081417	1308675	33715	343593	78223	19756	1778827	2175810	1681271	3059090
152	SAMPLE	215210-008	2176915	1330390	34964	343732	79244	19981	1868847	2315899	1730007	3115282
153	SAMPLE	215210-010	2102046	1317402	34324	347131	80374	20193	1791437	2208075	1691600	3050872
154	SAMPLE	215210-011	2318733	1504981	39330	382337	81850	21191	1919312	2162497	1884753	3183654
155	SAMPLE	215210-012	2095120	1313912	34749	349755	80393	19983	1811783	2204225	1707002	3075397
156	SAMPLE	215210-013	2074798	1300622	34316	344054	79992	19999	1806464	2187279	1672792	3046477
157	SAMPLE	215210-014	2079705	1300795	33679	344899	79661	19611	1781924	2209109	1666930	3047232
158	SAMPLE	215210-015	2065846	1288465	33738	341212	77925	19349	1763477	2186647	1674156	3032872
159	SAMPLE	215210-016	2085150	1296801	33116	337846	78430	19416	1784438	2218143	1661222	3057372
160	CCV		2298846	1454983	37846	381687	82186	20649	1891919	2213851	1831579	3177577
161	CCB		2323616	1438681	37576	376522	83199	21030	1941661	2317498	1844733	3160537
162	SAMPLE	215210-017	2147877	1332700	34828	351338	80215	19930	1799203	2204049	1686931	3075264
163	SAMPLE	215210-018	2125413	1337304	34956	346013	79351	20112	1809964	2196023	1693068	3062064
164	SAMPLE	215210-019	2125122	1319376	34804	344676	78999	19801	1798428	2185781	1688430	3052760
165	SAMPLE	215210-020	2105504	1325039	34524	347723	79250	19975	1779342	2168436	1675661	3012242
166	SAMPLE	215210-021	2109129	1329992	35105	348629	79778	19965	1803879	2201122	1697265	3046472
167	CCV		2357959	1497710	36045	388095	83172	19724	1918931	2236409	1866348	3194034
168	CCV		2414573	1529655	39944	382717	82651	21494	1937971	2233831	1893963	3198357
169	CCB		2416083	1484478	39359	381881	83996	21623	1974934	2322968	1887318	3179713
170	BLANK	QC514325	2395977	1483933	39088	374605	83107	21650	1971024	2332586	1877674	3159427
171	BS	QC514326	2442086	1515400	40373	399013	85529	22018	1997243	2337044	1913654 *	3211052
172	BSD	QC514327	2439931	1510248	40087	378220	83103	21933	1967170	2305455	1889989	3179001
173	MSS	215138-013	2372833	1503183	39431	375902	82177	21505	1920116	2183388	1849295	3139102
176	SAMPLE	215138-014	2394810	1534228	41034	378974	81970	22064	1946867	2162793	1903930	3184094
177	CCV		2364005	1521204	40663	380027	81952	21931	1957109	2269468	1908873	3217807
178	CCB		2396745	1471335	39465	368742	81381	21669	1967782	2295228	1863552	3165020
179	ICSA		1997498	1389590	41549	372550	74152	20945	1724936	1912722	1757934	3010318
180	ICSAB		1910830	1334644	39285	343972	70353	20249	1716469	1904268	1750844	3015538
185	CCV		2263170	1474967	38544	337908	73831	21113	1957564	2246549	1897761	3216525
186	CCB		2317476	1453016	38542	336838	75477	21557	2010528	2330650	1892724	3211269
187	CCB		2304599	1462265	38297	342746	76361	21534	1990375	2369227	1894731	3233426
188	BLANK	QC513667	2299405	1449706	38252	348110	77740	21271	2005007	2360333	1882609	3207752
189	BS	QC513668	2275162	1453716	38519	348658	76623	21534	1988820	2336014	1883232	3215015

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899392491

Date : 09/29/09 Reference : 09i29n00003
Sequence : MET16 09i29n00 Analyzed : 09/29/09 13:47

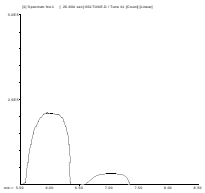
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
190	BSD	QC513669	2333331	1475024	39206	349064	77354	21772	2007867	2359241	1913644 *	3278568
191	MSS	215072-005	2297057	1452673	38743	352617	79001	21964	1985949	2327508	1886152	3198117
192	SER	QC513673	2309463	1467184	39185	352189	79635	21897	2033913	2373557	1909489	3260878
193	MS	QC513670	2306691	1479707	39310	354032	78995	21783	2024983	2380499	1904608	3245515
194	MSD	QC513671	2349446	1504622	38916	360344	79185	21625	2052554	2413666	1946485 *	3329578
195	PDS	QC513672	2340763	1529542	40546	355603	77757	22049	1975032	2281079	1935038 *	3254468
196	SAMPLE	215072-010	2339842	1476918	39291	356142	79505	21993	2030672	2388714	1916361 *	3246977
197	SAMPLE	215072-011	2327096	1459401	36492	358190	80167	20699	2008444	2357248	1887335	3223226
198	CCV		2375724	1539597	41189	364290	79349	22321 *	2016571	2291200	1951639 *	3280362
199	CCB		2352835	1499485	39747	358485	79718	22107	2035931	2385591	1928094 *	3278215
200	ICSA		1953630	1378153	41093	360306	72573	21097	1744981	1946900	1799197	3075309
201	ICSAB		1874650	1327986	38653	339832	70742	20210	1753405	1942023	1778383	3074556

MET16 QC Tune Report

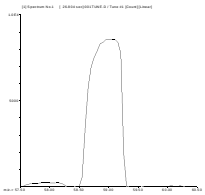
Data File: C:\ICPCHEM\1\DATA\09I29n00.B\001TUNE.D
Date Acquired: Sep 29 2009 01:31 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

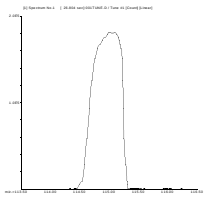
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	189242	188580	186810	185495	1.06	5.00	
59 Co	51080	51006	50388	49945	1.73	5.00	
115 In	1015908	1006999	1012061	999334	0.71	5.00	
205 Tl	93286	93973	94147	93981	0.60	5.00	



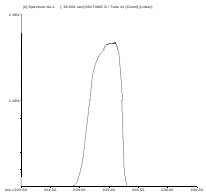
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



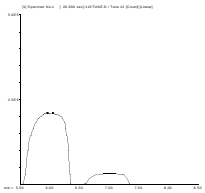
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET16 QC Tune Report

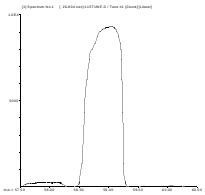
Data File: C:\ICPCHEM\1\DATA\09I29n00.B\115TUNE.D
Date Acquired: Sep 30 2009 09:24 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

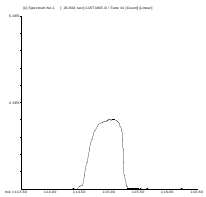
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	187758	192352	193829	195104	1.52	5.00	
59 Co	54185	55178	55708	56058	0.99	5.00	
115 In	1121415	1135431	1123587	1128019	1.07	5.00	
205 Tl	98313	97485	96815	96418	1.29	5.00	



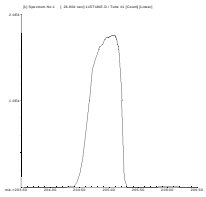
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



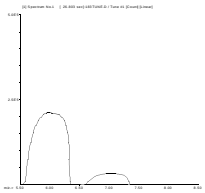
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET16 QC Tune Report

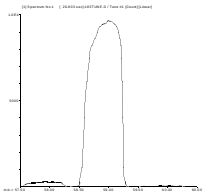
Data File: C:\ICPCHEM\1\DATA\09I29n00.B\183TUNE.D
Date Acquired: Sep 30 2009 09:12 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s12846
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

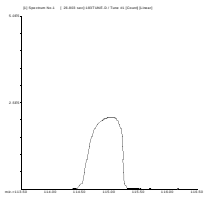
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	180931	187281	189758	191454	2.25	5.00	
59 Co	54893	56296	56943	56948	2.15	5.00	
115 In	1157420	1162675	1155734	1151249	0.53	5.00	
205 Tl	99870	98596	98501	98043	1.16	5.00	



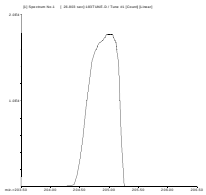
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Water: EPA 6020

Inst : MET16 Reviewer : ---
Calnum : 899392491001 Date : 29-SEP-2009 13:47
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09i29n00004	899392491004		29-SEP-2009 13:58	S12854, S12847
L2	09i29n00005	899392491005		29-SEP-2009 14:08	S12855, S12847
L3	09i29n00006	899392491006		29-SEP-2009 14:19	S12856, S12847
L4	09i29n00007	899392491007		29-SEP-2009 14:29	S12857, S12847
L5	09i29n00008	899392491008		29-SEP-2009 14:40	S12852, S12847
L6	09i29n00009	899392491009		29-SEP-2009 14:50	S12853, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0106	0.0082	0.0075	0.0071	0.0070	0.0070	BLNK	-3.3031	143.583		0.0079	1.000	0.995	
Antimony	A	0.0068	0.0026	0.0027	0.0026	0.0026	0.0026	BLNK	-0.0068	390.264		0.0033	1.000	0.995	
Barium	A	9.3E-4	5.9E-4	5.7E-4	5.5E-4	5.4E-4	5.4E-4	BLNK	-0.0172	1846.41		6.2E-4	1.000	0.995	
Beryllium	A	0.0023	0.0021	0.0021	0.0021	0.0021	0.0020	BLNK	-0.0032	492.271		0.0021	1.000	0.995	
Cadmium	A	8.4E-4	7.4E-4	7.0E-4	7.1E-4	7.0E-4	6.9E-4	BLNK	-0.0122	1441.07		7.3E-4	1.000	0.995	
Calcium	A	0.0011	3.2E-4	2.4E-4	1.9E-4	1.9E-4	1.8E-4	BLNK	-32.395	5462.15		3.8E-4	1.000	0.995	
Lead	A	0.0139	0.0080	0.0076	0.0068	0.0066	0.0067	BLNK	-0.0694	150.076		0.0083	1.000	0.995	
Magnesium	A	0.0099	0.0074	0.0069	0.0065	0.0064	0.0063	BLNK	-0.7477	157.463		0.0072	1.000	0.995	
Potassium	A	0.1012	0.0254	0.0157	0.0070	0.0061	0.0060	BLNK	-153.42	168.458		0.0269	1.000	0.995	
Silver	A	0.0040	0.0030	0.0030	0.0029	0.0029	0.0028	BLNK	-0.0099	355.340		0.0031	1.000	0.995	
Thallium	A	0.0099	0.0070	0.0067	0.0066	0.0067	0.0070	BLNK	-0.0189	143.481		0.0073	0.999	0.995	
Arsenic	E	0.0072	0.0053	0.0049	0.0048	0.0047	0.0047	BLNK	-0.0310	213.645		0.0053	1.000	0.995	
Chromium	E	0.1108	0.0431	0.0375	0.0311	0.0298	0.0295	BLNK	-0.1194	33.8850		0.0470	1.000	0.995	
Manganese	E	0.0338	0.0161	0.0152	0.0135	0.0133	0.0131	BLNK	-0.0487	76.3284		0.0175	1.000	0.995	
Nickel	E	0.0288	0.0149	0.0149	0.0136	0.0131	0.0126	BLNK	-0.0210	78.5789		0.0163	1.000	0.995	
Sodium	E	0.0988	0.0265	0.0175	0.0092	0.0077	0.0075	BLNK	-111.65	133.062		0.0279	1.000	0.995	
Zinc	E	0.2011	0.0423	0.0243	0.0116	0.0100	0.0096	BLNK	-0.1719	103.123		0.0498	0.999	0.995	
Iron	H	0.0130	0.0081	0.0080	0.0075	0.0077	0.0071	BLNK	-1.3919	138.892		0.0086	0.998	0.995	
Selenium	H	0.0018	0.0012	0.0012	0.0012	0.0013	0.0011	BLNK	-0.0250	865.478		0.0013	0.997	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	19	50.00	11	100.0	4	1000	2	10000	0	20000	0
Antimony	A	0.100	**160**	0.500	-1	1.000	3	10.00	1	100.0	0	200.0	0
Barium	A	0.100	**54**	0.500	6	1.000	4	10.00	1	100.0	0	200.0	0
Beryllium	A	0.100	10	0.500	5	1.000	3	10.00	5	100.0	4	200.0	-1
Cadmium	A	0.100	9	0.500	4	1.000	-1	10.00	3	100.0	2	200.0	0
Calcium	A	10.00	**204**	50.00	9	100.0	1	1000	0	10000	1	20000	0
Lead	A	0.100	**38**	0.500	6	1.000	6	10.00	1	100.0	0	200.0	0
Magnesium	A	10.00	**49**	50.00	15	100.0	8	1000	3	10000	1	20000	0
Potassium	A	10.00	**71**	50.00	**22**	100.0	11	1000	2	10000	1	20000	0
Silver	A	0.100	**32**	0.500	4	1.000	6	10.00	3	100.0	2	200.0	0
Thallium	A	0.050	5	0.250	-8	0.500	-8	5.000	-6	50.00	-4	100.0	1
Arsenic	E	0.100	**23**	0.500	7	1.000	2	10.00	3	100.0	1	200.0	0
Chromium	E	0.100	**156**	0.500	**22**	1.000	15	10.00	4	100.0	1	200.0	0
Manganese	E	0.100	**109**	0.500	13	1.000	12	10.00	3	100.0	1	200.0	0
Nickel	E	0.100	**105**	0.500	13	1.000	15	10.00	6	100.0	3	200.0	-1
Sodium	E	10.00	**98**	50.00	**30**	100.0	**21**	1000	11	10000	1	20000	0
Zinc	E	0.100	**1802**	0.500	**302**	1.000	**133**	10.00	18	100.0	3	200.0	-1
Iron	H	10.00	**66**	50.00	10	100.0	9	1000	4	10000	7	20000	-2
Selenium	H	0.100	**27**	0.500	1	1.000	5	10.00	5	100.0	9	200.0	-2

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Water
EPA 6020

Inst : MET16
Calnum : 899392491001 Cal Date : 29-SEP-2009

ICV 899392491010 (09i29n00010 29-SEP-2009) stds: S12850, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10300	ug/L	3	10	
Antimony	A	100.0	101.5	ug/L	2	10	
Barium	A	100.0	100.6	ug/L	1	10	
Beryllium	A	100.0	106.8	ug/L	7	10	
Cadmium	A	100.0	99.89	ug/L	0	10	
Calcium	A	10000	10090	ug/L	1	10	
Lead	A	100.0	99.92	ug/L	0	10	
Magnesium	A	10000	10130	ug/L	1	10	
Potassium	A	10000	10210	ug/L	2	10	
Silver	A	100.0	107.0	ug/L	7	10	
Thallium	A	50.00	48.60	ug/L	-3	10	
Arsenic	E	100.0	104.1	ug/L	4	10	
Chromium	E	100.0	104.8	ug/L	5	10	
Manganese	E	100.0	103.1	ug/L	3	10	
Nickel	E	100.0	104.9	ug/L	5	10	
Sodium	E	10000	10450	ug/L	5	10	
Zinc	E	100.0	104.3	ug/L	4	10	
Iron	H	10000	10130	ug/L	1	10	
Selenium	H	100.0	101.1	ug/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491012 File : 09i29n00012 Time : 29-SEP-2009 15:21
Cal : 899392491001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	16.20	10.00	6.200	ug/L	ib ***
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	ND	0.05000	0.01280	ug/L	
Arsenic	E	[0.04570]	0.1000	0.03563	ug/L	!ib
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	2303125	4.64
Scandium	A	1288067	1320371	2.51
Scandium	E	34809	37869	8.79
Scandium	H	370865	380587	2.62
Germanium	H	76906	79680	3.61
Germanium	E	18451	19815	7.39
Indium	A	1716311	1710305	-0.35
Bismuth	A	2174128	2080148	-4.32
Yttrium	A	1593883	1592172	-0.11
Terbium	A	2862702	2824462	-1.34

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491179 File : 09i29n00179 Time : 30-SEP-2009 20:29
Cal : 899392491001 Caldate : 29-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3258	0.1000	ug/L	!a+
Barium	A	1.523	0.1000	ug/L	!a+
Beryllium	A	[0.02640]	0.1000	ug/L	
Cadmium	A	2.932	0.1000	ug/L	!a+
Lead	A	1.420	0.1000	ug/L	!a+
Silver	A	0.1906	0.1000	ug/L	!a+
Thallium	A	0.08960	0.05000	ug/L	!a+
Arsenic	E	0.5085	0.1000	ug/L	!a+
Chromium	E	10.09	0.1000	ug/L	!a+
Manganese	E	7.270	0.1000	ug/L	!a+
Nickel	E	4.084	0.1000	ug/L	!a+
Zinc	E	8.423	0.1000	ug/L	!a+
Selenium	H	0.2033	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	108800	ug/L	109
Calcium	A	300000	332000	ug/L	111
Magnesium	A	100000	102800	ug/L	103
Molybdenum	A	2000	2362	ug/L	118
Potassium	A	100000	112100	ug/L	112
Sodium	E	250000	256500	ug/L	103
Iron	H	250000	269700	ug/L	108

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	1997498	-9.24
Scandium	A	1288067	1389590	7.88
Scandium	E	34809	41549	19.36
Scandium	H	370865	372550	0.45
Germanium	H	76906	74152	-3.58
Germanium	E	18451	20945	13.52
Indium	A	1716311	1724936	0.50
Bismuth	A	2174128	1912722	-12.02
Yttrium	A	1593883	1757934	10.29
Terbium	A	2862702	3010318	5.16

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491180 File : 09i29n00180 Time : 30-SEP-2009 20:39
Cal : 899392491001 Caldate : 29-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	102300	ug/L	2		
Cadmium	A	100.0	104.0	ug/L	4	20	
Calcium	A	300000	317100	ug/L	6		
Magnesium	A	100000	97060	ug/L	-3		
Potassium	A	100000	107000	ug/L	7		
Silver	A	50.00	51.53	ug/L	3	20	
Arsenic	E	100.0	111.9	ug/L	12	20	
Chromium	E	200.0	209.9	ug/L	5	20	
Manganese	E	200.0	217.4	ug/L	9	20	
Nickel	E	200.0	193.1	ug/L	-3	20	
Sodium	E	250000	245900	ug/L	-2		
Zinc	E	100.0	96.99	ug/L	-3	20	
Iron	H	250000	267000	ug/L	7		
Selenium	H	100.0	107.3	ug/L	7	20	

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	370865	343972	-7.25
Scandium	A	1288067	1334644	3.62
Scandium	E	34809	39285	12.86
Germanium	H	76906	70353	-8.52
Germanium	E	18451	20249	9.74
Indium	A	1716311	1716469	0.01
Yttrium	A	1593883	1750844	9.85

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491185 File : 09i29n00185 Time : 30-SEP-2009 21:28
Cal : 899392491001 Caldate : 29-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0079	0.0068	10000	9723	ug/L	-3	10	
Antimony	A	0.0033	0.0026	100.0	101.8	ug/L	2	10	
Barium	A	6.2E-4	5.8E-4	100.0	106.2	ug/L	6	10	
Beryllium	A	0.0021	0.0021	100.0	104.1	ug/L	4	10	
Cadmium	A	7.3E-4	6.9E-4	100.0	99.02	ug/L	-1	10	
Calcium	A	3.8E-4	1.9E-4	10000	10110	ug/L	1	10	
Lead	A	0.0083	0.0067	100.0	100.8	ug/L	1	10	
Magnesium	A	0.0072	0.0060	10000	9398	ug/L	-6	10	
Potassium	A	0.0269	0.0061	10000	10180	ug/L	2	10	
Silver	A	0.0031	0.0030	100.0	104.9	ug/L	5	10	
Thallium	A	0.0073	0.0067	50.00	48.03	ug/L	-4	10	
Arsenic	E	0.0053	0.0049	100.0	103.8	ug/L	4	10	
Chromium	E	0.0470	0.0306	100.0	103.6	ug/L	4	10	
Manganese	E	0.0175	0.0135	100.0	103.1	ug/L	3	10	
Nickel	E	0.0163	0.0135	100.0	106.1	ug/L	6	10	
Sodium	E	0.0279	0.0073	10000	9647	ug/L	-4	10	
Zinc	E	0.0498	0.0096	100.0	99.25	ug/L	-1	10	
Iron	H	0.0086	0.0077	10000	10670	ug/L	7	10	
Selenium	H	0.0013	0.0012	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	2263170	2.83
Scandium	A	1288067	1474967	14.51
Scandium	E	34809	38544	10.73
Scandium	H	370865	337908	-8.89
Germanium	H	76906	73831	-4.00
Germanium	E	18451	21113	14.43
Indium	A	1716311	1957564	14.06
Bismuth	A	2174128	2246549	3.33
Yttrium	A	1593883	1897761	19.07
Terbium	A	2862702	3216525	12.36

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491187 File : 09i29n00187 Time : 30-SEP-2009 21:49
Cal : 899392491001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[4.798]	10.00	3.022	ug/L	!ib
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	[0.04750]	0.1000	0.04661	ug/L	!ib
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	ND	10.00	6.200	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	ND	0.05000	0.01280	ug/L	
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	[0.04800]	0.1000	0.04707	ug/L	!ib

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	2304599	4.71
Scandium	A	1288067	1462265	13.52
Scandium	E	34809	38297	10.02
Scandium	H	370865	342746	-7.58
Germanium	H	76906	76361	-0.71
Germanium	E	18451	21534	16.71
Indium	A	1716311	1990375	15.97
Bismuth	A	2174128	2369227	8.97
Yttrium	A	1593883	1894731	18.88
Terbium	A	2862702	3233426	12.95

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491198 File : 09i29n00198 Time : 30-SEP-2009 23:45
Cal : 899392491001 Caldate : 29-SEP-2009
Standards: S12851, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0079	0.0067	10000	9664	ug/L	-3	10	
Antimony	A	0.0033	0.0026	100.0	100.2	ug/L	0	10	
Barium	A	6.2E-4	5.7E-4	100.0	105.3	ug/L	5	10	
Beryllium	A	0.0021	0.0021	100.0	103.0	ug/L	3	10	
Cadmium	A	7.3E-4	6.8E-4	100.0	98.56	ug/L	-1	10	
Calcium	A	3.8E-4	1.8E-4	10000	10060	ug/L	1	10	
Lead	A	0.0083	0.0067	100.0	100.1	ug/L	0	10	
Magnesium	A	0.0072	0.0059	10000	9348	ug/L	-7	10	
Potassium	A	0.0269	0.0061	10000	10080	ug/L	1	10	
Silver	A	0.0031	0.0029	100.0	104.6	ug/L	5	10	
Thallium	A	0.0073	0.0067	50.00	47.91	ug/L	-4	10	
Arsenic	E	0.0053	0.0048	100.0	102.7	ug/L	3	10	i+ ***
Chromium	E	0.0470	0.0303	100.0	102.5	ug/L	3	10	
Manganese	E	0.0175	0.0134	100.0	102.0	ug/L	2	10	
Nickel	E	0.0163	0.0133	100.0	104.6	ug/L	5	10	
Sodium	E	0.0279	0.0072	10000	9519	ug/L	-5	10	
Zinc	E	0.0498	0.0096	100.0	99.01	ug/L	-1	10	i+ ***
Iron	H	0.0086	0.0076	10000	10550	ug/L	6	10	
Selenium	H	0.0013	0.0012	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	2375724	7.94
Scandium	A	1288067	1539597	19.53
Scandium	E	34809	41189	18.33
Scandium	H	370865	364290	-1.77
Germanium	H	76906	79349	3.18
Germanium	E	18451	22321	**20.97 ***
Indium	A	1716311	2016571	17.49
Bismuth	A	2174128	2291200	5.38
Yttrium	A	1593883	1951639	**22.45 ***
Terbium	A	2862702	3280362	14.59

+=high bias i=ISTD failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491199 File : 09i29n00199 Time : 30-SEP-2009 23:56
Cal : 899392491001 Caldate : 29-SEP-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	[4.728]	10.00	3.022	ug/L	!ib
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	ND	10.00	6.200	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01850]	0.05000	0.01280	ug/L	!ib
Arsenic	E	[0.08710]	0.1000	0.03563	ug/L	!ib
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	2352835	6.90
Scandium	A	1288067	1499485	16.41
Scandium	E	34809	39747	14.19
Scandium	H	370865	358485	-3.34
Germanium	H	76906	79718	3.66
Germanium	E	18451	22107	19.81
Indium	A	1716311	2035931	18.62
Bismuth	A	2174128	2385591	9.73
Yttrium	A	1593883	1928094	**20.97 ***
Terbium	A	2862702	3278215	14.51

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491200 File : 09i29n00200 Time : 01-OCT-2009 00:06
Cal : 899392491001 Caldate : 29-SEP-2009
Standards: S12848, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3334	0.1000	ug/L	!a+
Barium	A	1.487	0.1000	ug/L	!a+
Beryllium	A	[0.02950]	0.1000	ug/L	
Cadmium	A	2.839	0.1000	ug/L	!a+
Lead	A	1.392	0.1000	ug/L	!a+
Silver	A	0.1784	0.1000	ug/L	!a+
Thallium	A	0.09240	0.05000	ug/L	!a+
Arsenic	E	0.4231	0.1000	ug/L	!a+
Chromium	E	10.11	0.1000	ug/L	!a+
Manganese	E	7.055	0.1000	ug/L	!a+
Nickel	E	4.038	0.1000	ug/L	!a+
Zinc	E	7.741	0.1000	ug/L	!a+
Selenium	H	0.2399	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	105900	ug/L	106
Calcium	A	300000	327300	ug/L	109
Magnesium	A	100000	100100	ug/L	100
Molybdenum	A	2000	2313	ug/L	116
Potassium	A	100000	109900	ug/L	110
Sodium	E	250000	253700	ug/L	101
Iron	H	250000	274200	ug/L	110

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2200929	1953630	-11.24
Scandium	A	1288067	1378153	6.99
Scandium	E	34809	41093	18.05
Scandium	H	370865	360306	-2.85
Germanium	H	76906	72573	-5.63
Germanium	E	18451	21097	14.34
Indium	A	1716311	1744981	1.67
Bismuth	A	2174128	1946900	-10.45
Yttrium	A	1593883	1799197	12.88
Terbium	A	2862702	3075309	7.43

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899392491201 File : 09i29n00201 Time : 01-OCT-2009 00:17
Cal : 899392491001 Caldate : 29-SEP-2009
Standards: S12849, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100000	ug/L	0		
Cadmium	A	100.0	102.0	ug/L	2	20	
Calcium	A	300000	313900	ug/L	5		
Magnesium	A	100000	94150	ug/L	-6		
Potassium	A	100000	105800	ug/L	6		
Silver	A	50.00	50.87	ug/L	2	20	
Arsenic	E	100.0	111.0	ug/L	11	20	
Chromium	E	200.0	210.1	ug/L	5	20	
Manganese	E	200.0	218.7	ug/L	9	20	
Nickel	E	200.0	193.2	ug/L	-3	20	
Sodium	E	250000	242500	ug/L	-3		
Zinc	E	100.0	96.38	ug/L	-4	20	
Iron	H	250000	266100	ug/L	6		
Selenium	H	100.0	106.4	ug/L	6	20	

ISTD (ICALBLK 09i29n00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	370865	339832	-8.37
Scandium	A	1288067	1327986	3.10
Scandium	E	34809	38653	11.04
Germanium	H	76906	70742	-8.01
Germanium	E	18451	20210	9.53
Indium	A	1716311	1753405	2.16
Yttrium	A	1593883	1778383	11.58

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 99395103

Instrument : MET09 Begun : 10/01/09 09:03
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met09_sn_6010a	ICALBLK				10/01/09 09:03	1.0		
002	met09_sn_6010a	ICAL	CRIM08			10/01/09 09:08	1.0	1	
003	met09_sn_6010a	ICAL	CRI3			10/01/09 09:14	1.0	2	
004	met09_sn_6010a	ICAL	CS100			10/01/09 09:19	1.0	3	
005	met09_sn_6010a	ICAL	CS1K			10/01/09 09:24	1.0	4	
006	met09_sn_6010a	ICAL	CS10K			10/01/09 09:28	1.0	5	
007	met09_sn_6010a	ICAL	CS100K			10/01/09 09:34	1.0	6	
008	met09_sn_6010a	ICV				10/01/09 09:39	1.0	7	
009	met09_sn_6010a	ICB				10/01/09 09:51	1.0		
010	met09_sn_6010a	CRI				10/01/09 10:07	1.0	1	
011	met09_sn_6010a	ICSA				10/01/09 10:12	1.0	8	10:AL=500000
012	met09_sn_6010a	ICSAB				10/01/09 10:25	1.0	9	5:AL=490000
013	met09_sn_6010a	BLANK	QC514530	Soil	155520	10/01/09 10:31	1.0		
014	met09_sn_6010a	BS	QC514531	Soil	155520	10/01/09 10:37	1.0		
015	met09_sn_6010a	BSD	QC514532	Soil	155520	10/01/09 10:40	1.0		
016	met09_sn_6010a	MSS	215147-002	Soil	155520	10/01/09 10:44	1.0		2:FE=380000
017	met09_sn_6010a	MS	QC514533	Soil	155520	10/01/09 10:48	1.0		1:FE=380000
018	met09_sn_6010a	MSD	QC514534	Soil	155520	10/01/09 10:52	1.0		1:FE=380000
019	met09_sn_6010a	SER	QC514535	Soil	155520	10/01/09 10:55	5.0		
020	met09_sn_6010a	PDS	QC514536	Soil	155520	10/01/09 11:00	1.0	10 11	
021	met09_sn_6010a	CCV				10/01/09 11:04	1.0	12	
022	met09_sn_6010a	CCB				10/01/09 11:10	1.0		
023	met09_sn_6010a	SAMPLE	215239-001	Soil	155520	10/01/09 11:15	1.0		2:FE=280000
024	met09_sn_6010a	ICSAB				10/01/09 11:19	1.0	9	5:AL=500000
025	met09_sn_6010a	X	RINSE			10/01/09 11:25	1.0		
026	met09_sn_6010a	CRI				10/01/09 11:30	1.0	1	
027	met09_sn_6010a	X	RINSE			10/01/09 11:36	1.0		
028	met09_sn_6010a	BLANK	QC514575	TCLP Leachate	155532	10/01/09 11:41	10.0		1:NA=150000
029	met09_sn_6010a	BS	QC514576	TCLP Leachate	155532	10/01/09 11:49	1.0		
030	met09_sn_6010a	BSD	QC514577	TCLP Leachate	155532	10/01/09 11:53	1.0		
031	met09_sn_6010a	MSS	215192-001	TCLP Leachate	155532	10/01/09 11:57	10.0		1:NA=150000
032	met09_sn_6010a	MS	QC514578	TCLP Leachate	155532	10/01/09 12:04	10.0		
033	met09_sn_6010a	CCV				10/01/09 12:11	1.0	12	
034	met09_sn_6010a	CCB				10/01/09 12:17	1.0		
035	met09_sn_6010a	MSD	QC514579	TCLP Leachate	155532	10/01/09 12:22	10.0		
036	met09_sn_6010a	SAMPLE	215239-001	Soil	155520	10/01/09 12:29	1.0		2:FE=280000
037	met09_sn_6010a	ICSAB				10/01/09 12:33	1.0	9	5:AL=490000
038	met09_sn_6010a	X	RINSE			10/01/09 12:39	1.0		
039	met09_sn_6010a	BLANK	QC514585	WET Leachate	155534	10/01/09 12:44	10.0		1:NA=160000
040	met09_sn_6010a	BS	QC514586	WET Leachate	155534	10/01/09 12:52	1.0		
041	met09_sn_6010a	BSD	QC514587	WET Leachate	155534	10/01/09 12:56	1.0		
042	met09_sn_6010a	MSS	215214-001	WET Leachate	155534	10/01/09 12:59	10.0		1:NA=140000
043	met09_sn_6010a	MS	QC514588	WET Leachate	155534	10/01/09 13:07	10.0		
044	met09_sn_6010a	MSS	215214-001	WET Leachate	155534	10/01/09 13:14	10.0		1:NA=150000
045	met09_sn_6010a	CCV				10/01/09 13:22	1.0	12	
046	met09_sn_6010a	CCB				10/01/09 13:27	1.0		
047	met09_sn_6010a	MSD	QC514589	WET Leachate	155534	10/01/09 13:33	10.0		
048	met09_sn_6010a	SER	QC514590	WET Leachate	155534	10/01/09 13:40	50.0		
049	met09_sn_6010a	PDS	QC514591	WET Leachate	155534	10/01/09 13:45	10.0	10 11	
050	met09_sn_6010a	SAMPLE	215192-001	WET Leachate	155534	10/01/09 13:51	10.0		1:NA=160000
051	met09_sn_6010a	SAMPLE	215226-001	WET Leachate	155534	10/01/09 13:59	10.0		1:NA=160000
052	met09_sn_6010a	SAMPLE	215228-001	WET Leachate	155534	10/01/09 14:07	10.0		1:NA=160000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 99395103

Instrument : MET09 Begun : 10/01/09 09:03
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met09_sn_6010a	X	RINSE			10/01/09 14:13	1.0		
054	met09_sn_6010a	X				10/01/09 14:19	1.0	1	
055	met09_sn_6010a	CRI				10/01/09 14:22	1.0	1	
056	met09_sn_6010a	ICSAB				10/01/09 14:28	1.0	9	5:AL=500000
057	met09_sn_6010a	CCV				10/01/09 14:34	1.0	12	
058	met09_sn_6010a	X				10/01/09 14:40	1.0		
059	met09_sn_6010a	CCB				10/01/09 14:43	1.0		
060	met09_sn_6010a	BLANK	QC513667	Water	155316	10/01/09 14:47	1.0		
061	met09_sn_6010a	BS	QC513668	Water	155316	10/01/09 14:53	1.0		
062	met09_sn_6010a	BSD	QC513669	Water	155316	10/01/09 14:58	1.0		
063	met09_sn_6010a	MSS	215072-005	Water	155316	10/01/09 15:02	1.0		1:NA=230000
064	met09_sn_6010a	MS	QC513670	Water	155316	10/01/09 15:10	1.0		
065	met09_sn_6010a	MSD	QC513671	Water	155316	10/01/09 15:17	1.0		
066	met09_sn_6010a	SER	QC513673	Water	155316	10/01/09 15:23	5.0		
067	met09_sn_6010a	PDS	QC513672	Water	155316	10/01/09 15:29	1.0	13 14	
068	met09_sn_6010a	CCV				10/01/09 15:36	1.0	12	
069	met09_sn_6010a	CCB				10/01/09 15:41	1.0		
070	met09_sn_6010a	SAMPLE	215072-010	Water	155316	10/01/09 15:47	1.0		1:NA=190000
071	met09_sn_6010a	SAMPLE	215072-011	Water	155316	10/01/09 15:55	1.0		1:NA=310000
072	met09_sn_6010a	ICSAB				10/01/09 16:02	1.0	9	5:AL=500000
073	met09_sn_6010a	X	RINSE			10/01/09 16:08	1.0		
074	met09_sn_6010a	BLANK	QC514537	Soil	155521	10/01/09 16:14	1.0		
075	met09_sn_6010a	BS	QC514538	Soil	155521	10/01/09 16:19	1.0		
076	met09_sn_6010a	BSD	QC514539	Soil	155521	10/01/09 16:23	1.0		
077	met09_sn_6010a	MSS	215214-001	Soil	155521	10/01/09 16:27	1.0		4:FE=560000
078	met09_sn_6010a	MS	QC514540	Soil	155521	10/01/09 16:31	1.0		4:FE=580000
079	met09_sn_6010a	MSD	QC514541	Soil	155521	10/01/09 16:37	1.0		6:FE=620000
080	met09_sn_6010a	CCV				10/01/09 16:41	1.0	12	
081	met09_sn_6010a	X				10/01/09 16:46	1.0		
082	met09_sn_6010a	CCB				10/01/09 16:50	1.0		
083	met09_sn_6010a	SER	QC514542	Soil	155521	10/01/09 16:55	5.0		
084	met09_sn_6010a	PDS	QC514543	Soil	155521	10/01/09 17:00	1.0	10 11	2:FE=560000
085	met09_sn_6010a	SAMPLE	215237-001	Soil	155521	10/01/09 17:04	1.0		5:FE=620000
086	met09_sn_6010a	SAMPLE	215301-001	Soil	155521	10/01/09 17:08	1.0		4:FE=320000
087	met09_sn_6010a	SAMPLE	215301-002	Soil	155521	10/01/09 17:12	1.0		2:FE=230000
088	met09_sn_6010a	SAMPLE	215301-003	Soil	155521	10/01/09 17:15	1.0		4:FE=350000
089	met09_sn_6010a	SAMPLE	215301-004	Soil	155521	10/01/09 17:19	1.0		3:CA=350000
090	met09_sn_6010a	SAMPLE	215302-001	Soil	155521	10/01/09 17:23	1.0		1:FE=120000
091	met09_sn_6010a	SAMPLE	215302-002	Soil	155521	10/01/09 17:28	1.0		1:FE=160000
092	met09_sn_6010a	SAMPLE	215302-003	Soil	155521	10/01/09 17:32	1.0		3:FE=400000
093	met09_sn_6010a	CCV				10/01/09 17:36	1.0	12	
094	met09_sn_6010a	CCB				10/01/09 17:42	1.0		
095	met09_sn_6010a	SAMPLE	215302-004	Soil	155521	10/01/09 17:47	1.0		3:FE=420000
096	met09_sn_6010a	SAMPLE	215302-005	Soil	155521	10/01/09 17:53	1.0		2:FE=320000
097	met09_sn_6010a	SAMPLE	215302-006	Soil	155521	10/01/09 17:57	1.0		2:FE=230000
098	met09_sn_6010a	ICSAB				10/01/09 18:01	1.0	9	5:AL=500000
099	met09_sn_6010a	X	RINSE			10/01/09 18:06	1.0		
100	met09_sn_6010a	MSS	215214-001	Soil	155521	10/01/09 18:12	20.0		
101	met09_sn_6010a	MS	QC514540	Soil	155521	10/01/09 18:16	20.0		
102	met09_sn_6010a	MSD	QC514541	Soil	155521	10/01/09 18:21	20.0		
103	met09_sn_6010a	SER	QC514542	Soil	155521	10/01/09 18:26	100.0		
104	met09_sn_6010a	PDS	QC514543	Soil	155521	10/01/09 18:31	20.0	10 11	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 99395103

Instrument : MET09 Begun : 10/01/09 09:03
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met09_sn_6010a	CCV				10/01/09 18:34	1.0	12	
106	met09_sn_6010a	CCB				10/01/09 18:40	1.0		
107	met09_sn_6010a	SAMPLE	215237-001	Soil	155521	10/01/09 18:46	20.0		
108	met09_sn_6010a	SAMPLE	215301-001	Soil	155521	10/01/09 18:50	20.0		
109	met09_sn_6010a	SAMPLE	215301-002	Soil	155521	10/01/09 18:55	20.0		
110	met09_sn_6010a	SAMPLE	215301-003	Soil	155521	10/01/09 19:00	20.0		
111	met09_sn_6010a	SAMPLE	215301-004	Soil	155521	10/01/09 19:04	20.0		
112	met09_sn_6010a	SAMPLE	215302-001	Soil	155521	10/01/09 19:09	20.0		
113	met09_sn_6010a	SAMPLE	215302-002	Soil	155521	10/01/09 19:14	20.0		
114	met09_sn_6010a	SAMPLE	215302-003	Soil	155521	10/01/09 19:18	20.0		
115	met09_sn_6010a	SAMPLE	215302-004	Soil	155521	10/01/09 19:23	20.0		
116	met09_sn_6010a	SAMPLE	215302-005	Soil	155521	10/01/09 19:28	20.0		
117	met09_sn_6010a	CCV				10/01/09 19:33	1.0	12	
118	met09_sn_6010a	CCB				10/01/09 19:38	1.0		
119	met09_sn_6010a	SAMPLE	215302-006	Soil	155521	10/01/09 19:44	20.0		
120	met09_sn_6010a	ICSAB				10/01/09 19:49	1.0	9	5:AL=500000
121	met09_sn_6010a	X	RINSE			10/01/09 19:54	1.0		
122	met09_sn_6010a	MSS	215214-001	Soil	155521	10/01/09 20:00	1.0		4:FE=550000
123	met09_sn_6010a	SAMPLE	215237-001	Soil	155521	10/01/09 20:04	1.0		5:FE=570000
124	met09_sn_6010a	SAMPLE	215301-001	Soil	155521	10/01/09 20:08	1.0		4:FE=310000
125	met09_sn_6010a	SAMPLE	215301-002	Soil	155521	10/01/09 20:11	1.0		2:FE=240000
126	met09_sn_6010a	SAMPLE	215301-003	Soil	155521	10/01/09 20:15	1.0		4:FE=360000
127	met09_sn_6010a	SAMPLE	215301-004	Soil	155521	10/01/09 20:19	1.0		3:CA=350000
128	met09_sn_6010a	SAMPLE	215302-001	Soil	155521	10/01/09 20:23	1.0		1:FE=130000
129	met09_sn_6010a	CCV				10/01/09 20:27	1.0	12	
130	met09_sn_6010a	CCB				10/01/09 20:33	1.0		
131	met09_sn_6010a	SAMPLE	215302-002	Soil	155521	10/01/09 20:39	1.0		1:FE=150000
132	met09_sn_6010a	SAMPLE	215302-003	Soil	155521	10/01/09 20:43	1.0		3:FE=420000
133	met09_sn_6010a	SAMPLE	215302-004	Soil	155521	10/01/09 20:47	1.0		3:FE=420000
134	met09_sn_6010a	SAMPLE	215302-005	Soil	155521	10/01/09 20:53	1.0		2:FE=340000
135	met09_sn_6010a	SAMPLE	215302-006	Soil	155521	10/01/09 20:57	1.0		2:FE=230000
136	met09_sn_6010a	X				10/01/09 21:00	1.0	1	
137	met09_sn_6010a	CRI				10/01/09 21:04	1.0	1	
138	met09_sn_6010a	ICSAB				10/01/09 21:09	1.0	9	5:AL=500000
139	met09_sn_6010a	CCV				10/01/09 21:15	1.0	12	
140	met09_sn_6010a	X				10/01/09 21:21	1.0		
141	met09_sn_6010a	CCB				10/01/09 21:24	1.0		

AH 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 141.

Standards used: 1=S12500 2=S12732 3=S12797 4=S12796 5=S12795 6=S12798 7=S12881 8=S12810 9=S12730 10=S12182 11=S12183 12=S12882 13=S9267 14=S9268

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 99395103

Date : 10/01/09 Reference : met09_sn_6010a
Sequence : MET09 10/01/09 Analyzed : 10/01/09 09:08

#	Type	Sample ID	Y A
		ICAL STD	4690796
		LOWER LIMIT	1407239
		UPPER LIMIT	9381592
009	ICB		4559844
011	ICSA		3927961
012	ICSAB		3875766
013	BLANK	QC514530	4695796
014	BS	QC514531	4462766
015	BSD	QC514532	4385199
017	MS	QC514533	4376860
018	MSD	QC514534	4460322
019	SER	QC514535	4597340
020	PDS	QC514536	4471956
021	CCV		4376124
022	CCB		4610115
024	ICSAB		4168925
028	BLANK	QC514575	4354046
029	BS	QC514576	4395503
030	BSD	QC514577	4355054
031	MSS	215192-001	4303662
032	MS	QC514578	4390809
033	CCV		4506126
034	CCB		4813253
035	MSD	QC514579	4333175
037	ICSAB		3882288
039	BLANK	QC514585	4493733
040	BS	QC514586	4404191
041	BSD	QC514587	4484544
042	MSS	215214-001	4365621
043	MS	QC514588	4314314
044	MSS	215214-001	4320154
045	CCV		4314351
046	CCB		4749296
047	MSD	QC514589	4302494
048	SER	QC514590	4486375
049	PDS	QC514591	4263724
050	SAMPLE	215192-001	4429763
051	SAMPLE	215226-001	4374841
052	SAMPLE	215228-001	4317551
056	ICSAB		3784224
057	CCV		4434511
059	CCB		4716231
060	BLANK	QC513667	4697358
061	BS	QC513668	4522520
062	BSD	QC513669	4596078
063	MSS	215072-005	4392080
064	MS	QC513670	4267687
065	MSD	QC513671	4269539
066	SER	QC513673	4639563
067	PDS	QC513672	4278543
068	CCV		4448671

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 99395103

Date : 10/01/09 Reference : met09_sn_6010a
Sequence : MET09 10/01/09 Analyzed : 10/01/09 09:08

#	Type	Sample ID	Y A
069	CCB		4820369
070	SAMPLE	215072-010	4336193
071	SAMPLE	215072-011	4240612
072	ICSAB		3898478
074	BLANK	QC514537	4770726
075	BS	QC514538	4560695
076	BSD	QC514539	4475996
077	MSS	215214-001	4295341
078	MS	QC514540	4242014
079	MSD	QC514541	4445843
080	CCV		4542496
082	CCB		4695207
083	SER	QC514542	4448538
084	PDS	QC514543	4380908
085	SAMPLE	215237-001	4670124
086	SAMPLE	215301-001	4289957
087	SAMPLE	215301-002	4389304
088	SAMPLE	215301-003	4357886
089	SAMPLE	215301-004	4267806
090	SAMPLE	215302-001	4480606
091	SAMPLE	215302-002	4318534
092	SAMPLE	215302-003	4375855
093	CCV		4491782
094	CCB		4728140
095	SAMPLE	215302-004	4426944
096	SAMPLE	215302-005	4302260
097	SAMPLE	215302-006	4352363
098	ICSAB		3872455
100	MSS	215214-001	4539849
101	MS	QC514540	4510881
102	MSD	QC514541	4651320
103	SER	QC514542	4660142
104	PDS	QC514543	4415853
105	CCV		4416097
106	CCB		4673783
107	SAMPLE	215237-001	4574534
108	SAMPLE	215301-001	4660563
109	SAMPLE	215301-002	4610155
110	SAMPLE	215301-003	4582119
111	SAMPLE	215301-004	4577830
112	SAMPLE	215302-001	4737441
113	SAMPLE	215302-002	4554392
114	SAMPLE	215302-003	4552654
115	SAMPLE	215302-004	4562666
116	SAMPLE	215302-005	4649974
117	CCV		4460405
118	CCB		4703813
119	SAMPLE	215302-006	4660355
120	ICSAB		3843027
122	MSS	215214-001	4345060
123	SAMPLE	215237-001	4486244
124	SAMPLE	215301-001	4298312

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 99395103

Date : 10/01/09 Reference : met09_sn_6010a
Sequence : MET09 10/01/09 Analyzed : 10/01/09 09:08

#	Type	Sample ID	Y A
125	SAMPLE	215301-002	4468075
126	SAMPLE	215301-003	4421607
127	SAMPLE	215301-004	4316367
128	SAMPLE	215302-001	4379486
129	CCV		4351952
130	CCB		4774447
131	SAMPLE	215302-002	4465107
132	SAMPLE	215302-003	4469992
133	SAMPLE	215302-004	4514825
134	SAMPLE	215302-005	4304546
135	SAMPLE	215302-006	4333598
138	ICSAB		3921662
139	CCV		4549065
141	CCB		4686565

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Water: EPA 6010B

Inst : MET09 Reviewer : ---
Calnum : 99395103001 Date : 01-OCT-2009 09:03
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met09_sn_6010a	99395103002	CRIM08	01-OCT-2009 09:08	S12500
L2	met09_sn_6010a	99395103003	CRI3	01-OCT-2009 09:14	S12732
L3	met09_sn_6010a	99395103004	CS100	01-OCT-2009 09:19	S12797
L4	met09_sn_6010a	99395103005	CS1K	01-OCT-2009 09:24	S12796
L5	met09_sn_6010a	99395103006	CS10K	01-OCT-2009 09:28	S12795
L6	met09_sn_6010a	99395103007	CS100K	01-OCT-2009 09:34	S12798

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	14.520	15.243	16.551	16.743	17.666		LOR0	0.00000	0.05664		16.145	1.000	0.995	
Arsenic	A	12.580	9.8133	9.8790	9.7881	9.9281		LOR0	0.00000	0.10074		10.398	1.000	0.995	
Barium	A	106.08	99.613	100.62	101.67	103.03		LOR0	0.00000	0.00971		102.20	1.000	0.995	
Boron	A	157.87	158.66		159.81	169.15		LOR0	0.00000	0.00592		161.37	1.000	0.995	
Cadmium	A	192.64	186.20	192.59	193.96	192.14		LOR0	0.00000	0.00520		191.51	1.000	0.995	
Lead	A	34.600	39.200	41.796	41.634	43.558		LOR0	0.00000	0.02297		40.158	1.000	0.995	
Manganese	A	340.60	336.65	342.19	338.07	334.18		LOR0	0.00000	0.00299		338.34	1.000	0.995	
Nickel	A	100.86	99.360	103.63	106.89	108.74		LOR0	0.00000	0.00920		103.90	1.000	0.995	
Selenium	A	16.220	13.157	13.175	13.134	13.868		LOR0	0.00000	0.07215		13.911	1.000	0.995	
Silver	A	443.36	466.63	490.35	495.96	506.40		LOR0	0.00000	0.00198		480.54	1.000	0.995	
Thallium	A	9.6200	10.467	10.175	10.061	10.482		LOR0	0.00000	0.09544		10.161	1.000	0.995	
Zinc	A	94.390	89.417	90.432	90.414	93.033		LOR0	0.00000	0.01075		91.537	1.000	0.995	
Aluminum	R	0.8500	0.7280		0.7136	0.6964	0.7168	LOR0	0.00000	1.39556		0.7410	1.000	0.995	
Calcium	R	8.7320	7.8593		7.9729	7.6626	7.5982	LOR0	0.00000	0.13160		7.9650	1.000	0.995	
Iron	R	4.7230	4.4590		4.3019	4.3005	4.2938	LOR0	0.00000	0.23289		4.4156	1.000	0.995	
Magnesium	R	1.1245	1.1255		1.1479	1.1164	1.1012	LOR0	0.00000	0.90799		1.1231	1.000	0.995	
Potassium	R	4.8846			4.4162	4.4285	4.6763	LOR0	0.00000	0.21396		4.6014	1.000	0.995	
Sodium	R	219.79			231.67	231.08	232.93	LOR0	0.00000	0.00429		228.87	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Antimony	A	10.00	-18	30.00	-14	100.0	-6	1000	-5	10000	0		
Arsenic	A	5.000	**27**	15.00	-1	100.0	0	1000	-1	10000	0		
Barium	A	5.000	3	15.00	-3	100.0	-2	1000	-1	10000	0		
Boron	A	100.0	-7	300.0	-6			1000	-5	10000	0		
Cadmium	A	5.000	0	15.00	-3	100.0	0	1000	1	10000	0		
Lead	A	3.000	**-21**	9.000	-10	100.0	-4	1000	-4	10000	0		
Manganese	A	5.000	2	15.00	1	100.0	2	1000	1	10000	0		
Nickel	A	5.000	-7	15.00	-9	100.0	-5	1000	-2	10000	0		
Selenium	A	10.00	17	30.00	-5	100.0	-5	1000	-5	10000	0		
Silver	A	5.000	-12	15.00	-7	100.0	-3	1000	-2	2000	0		
Thallium	A	10.00	-8	30.00	0	100.0	-3	1000	-4	10000	0		
Zinc	A	20.00	1	60.00	-4	100.0	-3	1000	-3	10000	0		
Aluminum	R	100.0	19	300.0	2			1000	0	10000	-3	1E+5	0
Calcium	R	200.0	15	600.0	3			1000	5	10000	1	1E+5	0
Iron	R	100.0	10	300.0	4			1000	0	10000	0	1E+5	0
Magnesium	R	200.0	2	600.0	2			1000	4	10000	1	1E+5	0
Potassium	R	500.0	5					1000	-6	10000	-5	1E+5	0
Sodium	R	500.0	-6					1000	-1	10000	-1	1E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Water
EPA 6010B

Inst : MET09
Calnum : 99395103001 Cal Date : 01-OCT-2009

ICV 99395103008 (01-OCT-2009) stds: S12881

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	5000	4991	ug/L	0	10	
Arsenic	A	5000	5244	ug/L	5	10	
Barium	A	5000	5157	ug/L	3	10	
Boron	A	5000	5122	ug/L	2	10	
Cadmium	A	5000	5182	ug/L	4	10	
Lead	A	5000	5132	ug/L	3	10	
Manganese	A	5000	4961	ug/L	-1	10	
Nickel	A	5000	5033	ug/L	1	10	
Selenium	A	5000	5036	ug/L	1	10	
Silver	A	1000	935.5	ug/L	-6	10	
Thallium	A	5000	5009	ug/L	0	10	
Zinc	A	5000	5067	ug/L	1	10	
Aluminum	R	20000	20200	ug/L	1	10	
Calcium	R	20000	20650	ug/L	3	10	
Iron	R	20000	20490	ug/L	2	10	
Magnesium	R	20000	20600	ug/L	3	10	
Potassium	R	20000	20060	ug/L	0	10	
Sodium	R	20000	20060	ug/L	0	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103009.2 File : met09_sn_6010a Time : 01-OCT-2009 09:51
Cal : 99395103001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	ND	5.000	3.155	ug/L	
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	[2.088]	3.000	1.212	ug/L	!ib
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4559844	-2.79

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103011.2 File : met09_sn_6010a Time : 01-OCT-2009 10:12
Cal : 99395103001 Caldate : 01-OCT-2009
Standards: S12810

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	[-9.638]	10.00	ug/L	!a-
Arsenic	A	[1.677]	5.000	ug/L	
Barium	A	[-1.623]	5.000	ug/L	
Boron	A	[-52.23]	100.0	ug/L	
Cadmium	A	[3.601]	5.000	ug/L	!a+
Lead	A	[-2.139]	3.000	ug/L	!a-
Selenium	A	[2.150]	10.00	ug/L	
Silver	A	[1.493]	5.000	ug/L	
Thallium	A	[-5.646]	10.00	ug/L	!a-
Zinc	A	[3.934]	20.00	ug/L	
Potassium	R	[246.1]	500.0	ug/L	
Sodium	R	[96.84]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	18800	ug/L	94
Copper	A	20000	19780	ug/L	99
Manganese	A	20000	17540	ug/L	88
Nickel	A	20000	17150	ug/L	86
Vanadium	A	20000	20050	ug/L	100
Aluminum	R	500000	495400	ug/L	99
Calcium	R	500000	477900	ug/L	96
Iron	R	200000	189800	ug/L	95
Magnesium	R	500000	482700	ug/L	97
Titanium	R	20000	20770	ug/L	104

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	3927961	-16.26

!=warning +=high bias -=low bias a=ICSA

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103057.1 File : met09_sn_6010a Time : 01-OCT-2009 14:34
Cal : 99395103001 Caldate : 01-OCT-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	16.145	17.522	5000	4962	ug/L	-1	10	
Arsenic	A	10.398	10.315	5000	5196	ug/L	4	10	
Barium	A	102.20	105.19	5000	5105	ug/L	2	10	
Boron	A	161.37	170.02	5000	5029	ug/L	1	10	
Cadmium	A	191.51	196.51	5000	5113	ug/L	2	10	
Lead	A	40.158	42.912	5000	4928	ug/L	-1	10	
Manganese	A	338.34	335.98	5000	5026	ug/L	1	10	
Nickel	A	103.90	108.43	5000	4987	ug/L	0	10	
Selenium	A	13.911	14.095	5000	5085	ug/L	2	10	
Silver	A	480.54	472.77	1000	937.5	ug/L	-6	10	
Thallium	A	10.161	10.518	5000	5019	ug/L	0	10	
Zinc	A	91.537	93.196	5000	5010	ug/L	0	10	
Aluminum	R	0.7410	0.7352	20000	20520	ug/L	3	10	
Calcium	R	7.9650	7.8652	20000	20700	ug/L	4	10	
Iron	R	4.4156	4.3659	20000	20340	ug/L	2	10	
Magnesium	R	1.1231	1.1465	20000	20820	ug/L	4	10	
Potassium	R	4.6014	4.6589	20000	19940	ug/L	0	10	
Sodium	R	228.87	230.86	20000	19820	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4434511	-5.46

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103059.1 File : met09_sn_6010a Time : 01-OCT-2009 14:43
Cal : 99395103001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	ND	5.000	3.155	ug/L	
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	[1.505]	3.000	1.212	ug/L	!ib
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4716231	0.54

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103068.1 File : met09_sn_6010a Time : 01-OCT-2009 15:36
Cal : 99395103001 Caldate : 01-OCT-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	16.145	17.549	5000	4970	ug/L	-1	10	
Arsenic	A	10.398	10.284	5000	5180	ug/L	4	10	
Barium	A	102.20	105.32	5000	5111	ug/L	2	10	
Boron	A	161.37	171.34	5000	5068	ug/L	1	10	
Cadmium	A	191.51	196.96	5000	5125	ug/L	3	10	
Lead	A	40.158	42.814	5000	4917	ug/L	-2	10	
Manganese	A	338.34	334.62	5000	5006	ug/L	0	10	
Nickel	A	103.90	108.64	5000	4996	ug/L	0	10	
Selenium	A	13.911	14.056	5000	5070	ug/L	1	10	
Silver	A	480.54	472.58	1000	937.1	ug/L	-6	10	
Thallium	A	10.161	10.455	5000	4989	ug/L	0	10	
Zinc	A	91.537	93.430	5000	5023	ug/L	0	10	
Aluminum	R	0.7410	0.7344	20000	20500	ug/L	2	10	
Calcium	R	7.9650	7.8472	20000	20650	ug/L	3	10	
Iron	R	4.4156	4.4284	20000	20630	ug/L	3	10	
Magnesium	R	1.1231	1.1355	20000	20620	ug/L	3	10	
Potassium	R	4.6014	4.6911	20000	20070	ug/L	0	10	
Sodium	R	228.87	235.14	20000	20190	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4448671	-5.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103069.1 File : met09_sn_6010a Time : 01-OCT-2009 15:41
Cal : 99395103001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	ND	5.000	3.155	ug/L	
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	[2.125]	3.000	1.212	ug/L	!ib
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4820369	2.76

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103080.1 File : met09_sn_6010a Time : 01-OCT-2009 16:41
Cal : 99395103001 Caldate : 01-OCT-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	16.145	17.774	5000	5033	ug/L	1	10	
Arsenic	A	10.398	10.576	5000	5327	ug/L	7	10	
Barium	A	102.20	107.28	5000	5207	ug/L	4	10	
Boron	A	161.37	173.90	5000	5143	ug/L	3	10	
Cadmium	A	191.51	201.93	5000	5254	ug/L	5	10	
Lead	A	40.158	42.973	5000	4935	ug/L	-1	10	
Manganese	A	338.34	350.07	5000	5237	ug/L	5	10	
Nickel	A	103.90	111.61	5000	5133	ug/L	3	10	
Selenium	A	13.911	14.484	5000	5225	ug/L	4	10	
Silver	A	480.54	472.51	1000	937.0	ug/L	-6	10	
Thallium	A	10.161	10.637	5000	5076	ug/L	2	10	
Zinc	A	91.537	96.121	5000	5167	ug/L	3	10	
Aluminum	R	0.7410	0.7564	20000	21110	ug/L	6	10	
Calcium	R	7.9650	8.1314	20000	21400	ug/L	7	10	
Iron	R	4.4156	4.6002	20000	21430	ug/L	7	10	
Magnesium	R	1.1231	1.2093	20000	21960	ug/L	10	10	
Potassium	R	4.6014	4.8161	20000	20610	ug/L	3	10	
Sodium	R	228.87	236.41	20000	20300	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4542496	-3.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 99395103082.1 File : met09_sn_6010a Time : 01-OCT-2009 16:50
Cal : 99395103001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	5.859	ug/L	
Arsenic	A	ND	5.000	3.155	ug/L	
Barium	A	ND	5.000	2.438	ug/L	
Boron	A	ND	100.0	55.93	ug/L	
Cadmium	A	ND	5.000	2.619	ug/L	
Lead	A	ND	3.000	1.212	ug/L	
Manganese	A	ND	5.000	2.332	ug/L	
Nickel	A	ND	5.000	2.552	ug/L	
Selenium	A	ND	10.00	5.935	ug/L	
Silver	A	ND	5.000	2.000	ug/L	
Thallium	A	ND	10.00	5.472	ug/L	
Zinc	A	ND	20.00	12.29	ug/L	
Aluminum	R	ND	100.0	47.70	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	49.52	ug/L	
Magnesium	R	ND	200.0	200.0	ug/L	
Potassium	R	ND	500.0	294.3	ug/L	
Sodium	R	ND	500.0	301.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	4690796	4695207	0.09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019395179

Instrument : MET26 Begun : 10/01/09 10:19
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09j01k00001	TUN				10/01/09 10:19	1.0	1	
002	09j01k00002	X	RINSE			10/01/09 10:26	1.0	2	
003	09j01k00003	ICALBLK	CALBLANK			10/01/09 10:36	1.0	2	
004	09j01k00004	ICAL				10/01/09 10:46	1.0	3 2	
005	09j01k00005	ICAL				10/01/09 10:57	1.0	4 2	
006	09j01k00006	ICAL				10/01/09 11:16	1.0	5 2	
007	09j01k00007	ICAL				10/01/09 11:26	1.0	6 2	
008	09j01k00008	ICAL				10/01/09 11:36	1.0	7 2	
009	09j01k00009	ICAL				10/01/09 11:46	1.0	8 2	
010	09j01k00010	ICV				10/01/09 11:56	1.0	9 2	
011	09j01k00011	ICB				10/01/09 12:11	1.0	2	
012	09j01k00012	ICSA				10/01/09 12:24	1.0	10 2	7:CA=350000
013	09j01k00013	ICSAB				10/01/09 12:34	1.0	11 2	12:CA=320000
014	09j01k00014	X	RINSE			10/01/09 12:45	1.0	2	
015	09j01k00015	X	RINSE			10/01/09 12:55	1.0	2	
016	09j01k00016	BLANK	QC514318	Water	155467	10/01/09 13:05	5.0	2	
017	09j01k00017	BS	QC514319	Water	155467	10/01/09 13:15	5.0	2	
018	09j01k00018	BSD	QC514320	Water	155467	10/01/09 13:26	5.0	2	
019	09j01k00019	MSS	215217-001	Filtrate	155467	10/01/09 13:36	500.0	2	
020	09j01k00020	SER	QC514323	Filtrate	155467	10/01/09 13:46	2500	2	
021	09j01k00021	MS	QC514321	Filtrate	155467	10/01/09 13:56	500.0	2	
022	09j01k00022	MSD	QC514322	Filtrate	155467	10/01/09 14:03	500.0	2	
023	09j01k00023	PDS	QC514324	Filtrate	155467	10/01/09 14:13	500.0	12 13 2	
024	09j01k00024	CCV				10/01/09 14:23	1.0	14 2	
025	09j01k00025	CCB				10/01/09 14:33	1.0	2	
026	09j01k00026	SAMPLE	215217-002	Filtrate	155467	10/01/09 14:43	500.0	2	
027	09j01k00027	SAMPLE	215242-009	Water	155467	10/01/09 14:53	100.0	2	
028	09j01k00028	SER	QC513673	Water	155316	10/01/09 15:04	25.0	2	
029	09j01k00029	CCV				10/01/09 15:14	1.0	14 2	
030	09j01k00030	CCB				10/01/09 15:24	1.0	2	
031	09j01k00031	ICSA				10/01/09 15:34	1.0	10 2	7:CA=340000
032	09j01k00032	ICSAB				10/01/09 15:44	1.0	11 2	11:CA=320000
033	09j01k00033	X	RINSE			10/01/09 15:55	1.0	2	
034	09j01k00034	X	RINSE			10/01/09 16:05	1.0	2	
035	09j01k00035	MSS	215255-001	Filtrate	155464	10/01/09 16:15	100.0	2	1:NA=54000
036	09j01k00036	SER	QC514298	Filtrate	155464	10/01/09 16:25	500.0	2	
037	09j01k00037	PDS	QC514299	Filtrate	155464	10/01/09 16:36	100.0	2 12 13	1:NA=63000
038	09j01k00038	MSS	215255-001	Filtrate	155464	10/01/09 16:46	1000	2	
039	09j01k00039	CCV				10/01/09 16:56	1.0	14 2	
040	09j01k00040	CCB				10/01/09 17:06	1.0	2	
041	09j01k00041	BLANK	QC513874	Water	155362	10/01/09 17:16	5.0	2	
042	09j01k00042	BS	QC513875	Water	155362	10/01/09 17:26	5.0	2	
043	09j01k00043	BSD	QC513876	Water	155362	10/01/09 17:36	5.0	2	
044	09j01k00044	MSS	215166-001	Water	155362	10/01/09 17:46	5.0	2	1:NA=69000
045	09j01k00045	MS	QC513877	Water	155362	10/01/09 17:56	5.0	2	2:NA=71000
046	09j01k00046	MSD	QC513878	Water	155362	10/01/09 18:07	5.0	2	2:NA=67000
047	09j01k00047	SAMPLE	215166-002	Water	155362	10/01/09 18:17	5.0	2	1:NA=34000
048	09j01k00048	SAMPLE	215166-003	Water	155362	10/01/09 18:27	5.0	2	1:NA=36000
049	09j01k00049	CCV				10/01/09 18:37	1.0	14 2	
050	09j01k00050	CCB				10/01/09 18:47	1.0	2	
051	09j01k00051	BLANK	QC514291	Filtrate	155464	10/01/09 18:57	5.0	2	
052	09j01k00052	BS	QC514292	Filtrate	155464	10/01/09 19:08	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019395179

Instrument : MET26 Begun : 10/01/09 10:19
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09j01k00053	BSD	QC514293	Filtrate	155464	10/01/09 19:18	5.0	2	
054	09j01k00054	SER	QC514298	Filtrate	155464	10/01/09 19:28	5000	2	
055	09j01k00055	MS	QC514294	Filtrate	155464	10/01/09 19:38	500.0	2	
056	09j01k00056	MSD	QC514295	Filtrate	155464	10/01/09 19:48	500.0	2	
057	09j01k00057	PDS	QC514299	Filtrate	155464	10/01/09 19:59	1000	12 13 2	
058	09j01k00058	MSS	215255-023	Filtrate	155464	10/01/09 20:09	500.0	2	
059	09j01k00059	MS	QC514296	Filtrate	155464	10/01/09 20:19	500.0	2	
060	09j01k00060	MSD	QC514297	Filtrate	155464	10/01/09 20:29	500.0	2	
061	09j01k00061	CCV				10/01/09 20:39	1.0	14 2	
062	09j01k00062	CCB				10/01/09 20:49	1.0	2	
063	09j01k00063	TUN				10/01/09 21:01	1.0	1	
064	09j01k00064	X	RINSE			10/01/09 21:07	1.0	2	
065	09j01k00065	SAMPLE	215255-002	Filtrate	155464	10/01/09 21:18	50.0	2	
066	09j01k00066	SAMPLE	215255-003	Filtrate	155464	10/01/09 21:28	500.0	2	
067	09j01k00067	SAMPLE	215255-004	Filtrate	155464	10/01/09 21:38	500.0	2	
068	09j01k00068	SAMPLE	215255-005	Filtrate	155464	10/01/09 21:48	500.0	2	
069	09j01k00069	SAMPLE	215255-006	Filtrate	155464	10/01/09 21:58	50.0	2	
070	09j01k00070	SAMPLE	215255-007	Filtrate	155464	10/01/09 22:09	500.0	2	
071	09j01k00071	SAMPLE	215255-008	Filtrate	155464	10/01/09 22:19	500.0	2	
072	09j01k00072	SAMPLE	215255-009	Filtrate	155464	10/01/09 22:29	50.0	2	
073	09j01k00073	SAMPLE	215255-010	Filtrate	155464	10/01/09 22:39	500.0	2	
074	09j01k00074	SAMPLE	215255-011	Filtrate	155464	10/01/09 22:50	500.0	2	
075	09j01k00075	CCV				10/01/09 23:00	1.0	14 2	
076	09j01k00076	CCB				10/01/09 23:10	1.0	2	
077	09j01k00077	SAMPLE	215255-012	Filtrate	155464	10/01/09 23:20	500.0	2	
078	09j01k00078	SAMPLE	215255-013	Filtrate	155464	10/01/09 23:30	500.0	2	
079	09j01k00079	SAMPLE	215255-014	Filtrate	155464	10/01/09 23:41	500.0	2	
080	09j01k00080	SAMPLE	215255-015	Filtrate	155464	10/01/09 23:51	50.0	2	
081	09j01k00081	SAMPLE	215255-016	Filtrate	155464	10/02/09 00:01	500.0	2	
082	09j01k00082	SAMPLE	215255-017	Filtrate	155464	10/02/09 00:11	500.0	2	
083	09j01k00083	CCV				10/02/09 00:22	1.0	14 2	
084	09j01k00084	CCB				10/02/09 00:32	1.0	2	
085	09j01k00085	MSS	215255-001	Filtrate	155464	10/02/09 00:42	5.0	2	5:NA=1000000
086	09j01k00086	SER	QC514298	Filtrate	155464	10/02/09 00:52	25.0	2	
087	09j01k00087	MS	QC514294	Filtrate	155464	10/02/09 01:02	5.0	2	5:NA=1000000
088	09j01k00088	MSD	QC514295	Filtrate	155464	10/02/09 01:12	5.0	2	5:NA=1000000
089	09j01k00089	PDS	QC514299	Filtrate	155464	10/02/09 01:23	5.0	12 13 2	1:NA=1000000
090	09j01k00090	MSS	215255-023	Filtrate	155464	10/02/09 01:33	5.0	2	4:NA=840000
091	09j01k00091	MS	QC514296	Filtrate	155464	10/02/09 01:43	5.0	2	4:NA=840000
092	09j01k00092	MSD	QC514297	Filtrate	155464	10/02/09 01:53	5.0	2	4:NA=830000
093	09j01k00093	SAMPLE	215255-002	Filtrate	155464	10/02/09 02:03	5.0	2	2:NA=65000
094	09j01k00094	CCV				10/02/09 02:13	1.0	14 2	
095	09j01k00095	CCB				10/02/09 02:23	1.0	2	
096	09j01k00096	ICSA				10/02/09 02:34	1.0	10 2	7:CA=340000
097	09j01k00097	ICSAB				10/02/09 02:44	1.0	11 2	12:CA=320000
098	09j01k00098	X	RINSE			10/02/09 02:54	1.0	2	
099	09j01k00099	X	RINSE			10/02/09 03:05	1.0	2	
100	09j01k00100	X				10/02/09 03:15	1.0	2	
101	09j01k00101	SAMPLE	215255-003	Filtrate	155464	10/02/09 03:25	5.0	2	7:NA=1200000
102	09j01k00102	SAMPLE	215255-004	Filtrate	155464	10/02/09 03:35	5.0	2	5:NA=1100000
103	09j01k00103	SAMPLE	215255-005	Filtrate	155464	10/02/09 03:45	5.0	2	5:NA=1300000
104	09j01k00104	SAMPLE	215255-006	Filtrate	155464	10/02/09 03:56	5.0	2	2:NA=84000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019395179

Instrument : MET26 Begun : 10/01/09 10:19
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09j01k00105	SAMPLE	215255-007	Filtrate	155464	10/02/09 04:06	5.0	2	5:NA=1100000
106	09j01k00106	SAMPLE	215255-008	Filtrate	155464	10/02/09 04:16	5.0	2	5:NA=1200000
107	09j01k00107	SAMPLE	215255-009	Filtrate	155464	10/02/09 04:26	5.0	2	3:NA=68000
108	09j01k00108	SAMPLE	215255-010	Filtrate	155464	10/02/09 04:36	5.0	2	6:NA=950000
109	09j01k00109	SAMPLE	215255-011	Filtrate	155464	10/02/09 04:47	5.0	2	5:NA=1100000
110	09j01k00110	CCV				10/02/09 04:57	1.0	14 2	
111	09j01k00111	CCB				10/02/09 05:07	1.0	2	
112	09j01k00112	X				10/02/09 05:17	1.0	2	
113	09j01k00113	SAMPLE	215255-012	Filtrate	155464	10/02/09 05:27	5.0	2	3:NA=130000
114	09j01k00114	SAMPLE	215255-013	Filtrate	155464	10/02/09 05:37	5.0	2	5:NA=1100000
115	09j01k00115	SAMPLE	215255-014	Filtrate	155464	10/02/09 05:48	5.0	2	5:NA=1000000
116	09j01k00116	SAMPLE	215255-015	Filtrate	155464	10/02/09 05:58	5.0	2	
117	09j01k00117	SAMPLE	215255-016	Filtrate	155464	10/02/09 06:08	5.0	2	6:NA=810000
118	09j01k00118	SAMPLE	215255-017	Filtrate	155464	10/02/09 06:18	5.0	2	9:NA=1300000
119	09j01k00119	CCV				10/02/09 06:28	1.0	14 2	
120	09j01k00120	CCB				10/02/09 06:38	1.0	2	
121	09j01k00121	X				10/02/09 06:49	1.0	2	
122	09j01k00122	MSS	215217-001	Filtrate	155467	10/02/09 06:59	5.0	2	5:NA=530000
123	09j01k00123	SER	QC514323	Filtrate	155467	10/02/09 07:09	25.0	2	
124	09j01k00124	MS	QC514321	Filtrate	155467	10/02/09 07:19	5.0	2	5:NA=520000
125	09j01k00125	MSD	QC514322	Filtrate	155467	10/02/09 07:29	5.0	2	5:NA=510000
126	09j01k00126	TUN				10/02/09 07:40	1.0	1	
127	09j01k00127	X	RINSE			10/02/09 07:47	1.0	2	
128	09j01k00128	PDS	QC514324	Filtrate	155467	10/02/09 07:57	5.0	12 13 2	
129	09j01k00129	SAMPLE	215217-002	Filtrate	155467	10/02/09 08:07	5.0	2	5:NA=1100000
130	09j01k00130	CCV				10/02/09 08:17	1.0	14 2	
131	09j01k00131	CCB				10/02/09 08:28	1.0	2	
132	09j01k00132	X				10/02/09 08:38	1.0	2	
133	09j01k00133	BLANK	QC514516	Water	155518	10/02/09 08:48	5.0	2	
134	09j01k00134	BS	QC514517	Water	155518	10/02/09 08:58	5.0	2	
135	09j01k00135	BSD	QC514518	Water	155518	10/02/09 09:08	5.0	2	
136	09j01k00136	MSS	215219-001	Water	155518	10/02/09 09:19	5.0	2	2:NA=48000
137	09j01k00137	SER	QC514323	Filtrate	155467	10/02/09 09:29	25.0	2	
138	09j01k00138	MS	QC514519	Water	155518	10/02/09 09:39	5.0	2	
139	09j01k00139	MSD	QC514520	Water	155518	10/02/09 09:49	5.0	2	
140	09j01k00140	SAMPLE	215219-002	Water	155518	10/02/09 09:59	5.0	2	2:NA=47000
141	09j01k00141	CCV				10/02/09 10:10	1.0	14 2	
142	09j01k00142	CCB				10/02/09 10:20	1.0	2	
143	09j01k00143	X				10/02/09 10:30	1.0	2	
144	09j01k00144	MSS	215210-001	Filtrate	155466	10/02/09 10:41	5.0	2	
145	09j01k00145	SAMPLE	215210-004	Filtrate	155466	10/02/09 10:51	5.0	2	1:NA=31000
146	09j01k00146	SAMPLE	215210-005	Filtrate	155466	10/02/09 11:01	5.0	2	1:NA=33000
147	09j01k00147	SAMPLE	215210-006	Filtrate	155466	10/02/09 11:11	5.0	2	1:NA=28000
148	09j01k00148	SAMPLE	215210-007	Filtrate	155466	10/02/09 11:22	5.0	2	1:NA=29000
149	09j01k00149	SAMPLE	215210-010	Filtrate	155466	10/02/09 11:32	5.0	2	1:NA=27000
150	09j01k00150	SAMPLE	215210-012	Filtrate	155466	10/02/09 11:42	5.0	2	1:NA=26000
151	09j01k00151	SAMPLE	215210-013	Filtrate	155466	10/02/09 11:52	5.0	2	1:NA=25000
152	09j01k00152	BLANK	QC514072	Water	155410	10/02/09 12:02	5.0	2	
153	09j01k00153	CCV				10/02/09 12:13	1.0	14 2	
154	09j01k00154	CCB				10/02/09 12:23	1.0	2	
155	09j01k00155	SAMPLE	215255-010	Filtrate	155464	10/02/09 12:32	50.0	2	2:NA=95000
156	09j01k00156	SAMPLE	215255-016	Filtrate	155464	10/02/09 12:42	50.0	2	1:NA=97000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019395179

Instrument : MET26 Begun : 10/01/09 10:19
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	09j01k00157	SAMPLE	215255-017	Filtrate	155464	10/02/09 12:52	50.0	2	4:NA=140000
158	09j01k00158	CCV				10/02/09 13:02	1.0	14 2	
159	09j01k00159	CCB				10/02/09 13:12	1.0	2	
160	09j01k00160	BLANK	QC513899	Filtrate	155367	10/02/09 13:22	5.0	2	
161	09j01k00161	ICSA				10/02/09 13:33	1.0	10 2	7:CA=340000
162	09j01k00162	ICSAB				10/02/09 13:43	1.0	11 2	12:CA=320000
163	09j01k00163	X	RINSE			10/02/09 13:53	1.0	2	
164	09j01k00164	X	RINSE			10/02/09 14:03	1.0	2	
165	09j01k00165	BS	QC513900	Filtrate	155367	10/02/09 14:14	5.0	2	
166	09j01k00166	BSD	QC513901	Filtrate	155367	10/02/09 14:24	5.0	2	
167	09j01k00167	MSS	215104-002	Filtrate	155367	10/02/09 14:34	50.0	2	2:NA=140000
168	09j01k00168	SER	QC513904	Filtrate	155367	10/02/09 14:44	250.0	2	
169	09j01k00169	MS	QC513902	Filtrate	155367	10/02/09 14:55	50.0	2	
170	09j01k00170	MSD	QC513903	Filtrate	155367	10/02/09 15:05	50.0	2	
171	09j01k00171	PDS	QC513905	Filtrate	155367	10/02/09 15:15	50.0	2 12 13	2:NA=140000
172	09j01k00172	CCV				10/02/09 15:25	1.0	14 2	
173	09j01k00173	CCB				10/02/09 15:35	1.0	2	
174	09j01k00174	X				10/02/09 15:45	1.0	2	
175	09j01k00175	SAMPLE	215104-003	Filtrate	155367	10/02/09 15:49	50.0	2	2:NA=140000
176	09j01k00176	SAMPLE	215104-004	Filtrate	155367	10/02/09 16:00	50.0	2	
177	09j01k00177	MS	QC514312	Filtrate	155466	10/02/09 16:09	5.0	2	
178	09j01k00178	MSD	QC514313	Filtrate	155466	10/02/09 16:19	5.0	2	
179	09j01k00179	MS	QC514314	Filtrate	155466	10/02/09 16:30	5.0	2	1:NA=32000
180	09j01k00180	MSD	QC514315	Filtrate	155466	10/02/09 16:40	5.0	2	1:NA=31000
181	09j01k00181	CCV				10/02/09 16:50	1.0	14 2	
182	09j01k00182	CCB				10/02/09 17:00	1.0	2	
183	09j01k00183	ICSA				10/02/09 17:10	1.0	10 2	7:CA=340000
184	09j01k00184	ICSAB				10/02/09 17:19	1.0	11 2	12:CA=310000

JYF 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 184.

Standards used: 1=S13057 2=S13058 3=S13065 4=S13066 5=S13067 6=S13068 7=S13063 8=S13064 9=S13061 10=S13059 11=S13060 12=S10997 13=S10998 14=S13062

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019395179

Date : 10/01/09 Reference : 09j01k00003
Sequence : MET26 09j01k00 Analyzed : 10/01/09 10:36

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1167826	2760193	43031	622039	171696	30411	3793835	2792999	4236755	4778272
		LOWER LIMIT	350348	828058	12909	186612	51509	9123	1138151	837900	1271027	1433482
		UPPER LIMIT	1401391	3312232	51637	746447	206035	36493	4552602	3351599	5084106	5733926
011	ICB		1162277	2718071	42810	621391	171581	30143	3777904	2817891	4195058	4771604
012	ICSA		955122	2616065	41765	612704	161206	29805	3258228	2377572	3976801	4479674
013	ICSAB		954657	2565164	40398	594247	158820	29241	3254212	2319322	3935202	4447480
016	BLANK	QC514318	1120427	2601034	40552	590245	163640	29020	3633098	2715436	4035307	4603944
017	BS	QC514319	1130353	2591032	40393	589036	162631	28658	3577660	2708945	4006557	4615876
018	BSD	QC514320	1112070	2556490	40235	583960	160335	28709	3568415	2681716	3973964	4601014
019	MSS	215217-001	1112497	2559684	40383	587775	163011	28853	3609573	2712899	3973092	4602138
020	SER	QC514323	1118784	2604282	41490	600174	166682	29593	3671119	2744661	4056255	4649464
021	MS	QC514321	1110909	2604305	41532	596097	166283	29427	3662886	2745509	4062992	4638976
022	MSD	QC514322	1109959	2578436	41019	594425	165162	29326	3639583	2730553	4021468	4604538
023	PDS	QC514324	1089194	2597583	40852	587278	160809	28859	3542108	2651610	4007252	4597605
024	CCV		1094936	2602552	41007	592424	162404	29160	3556655	2660563	4021817	4630551
025	CCB		1117241	2578438	41876	592532	164872	29404	3637080	2690712	4032280	4624008
026	SAMPLE	215217-002	1093575	2484407	40846	591039	161376	28748	3538782	2655919	3910655	4514199
028	SER	QC513673	1075995	2518231	40432	601874	166994	29154	3586090	2729007	3935371	4608147
029	CCV		1080664	2528928	40204	581604	160189	28715	3514947	2647655	3946692	4603626
030	CCB		1115722	2520302	40945	581683	162530	29236	3585787	2689458	3960657	4629505
031	ICSA		952141	2480787	40725	616030	160092	29647	3183246	2288666	3804464	4365303
032	ICSAB		934622	2421033	39381	569664	154336	28612	3136842	2237477	3752391	4297842
035	MSS	215255-001	1028765	2382533	38695	552632	152981	27269	3379543	2488723	3753841	4353789
036	SER	QC514298	1041818	2377056	38884	553668	153810	27824	3441984	2564326	3760265	4389134
037	PDS	QC514299	1021234	2383882	38138	548572	151151	27302	3335192	2469867	3748632	4387753
038	MSS	215255-001	1042647	2376888	38711	551422	154351	27816	3446942	2587874	3798503	4406099
039	CCV		1035223	2384381	38217	546753	153821	27378	3338523	2510217	3747396	4384806
040	CCB		1038785	2351039	38298	543585	154476	27964	3426652	2550565	3766116	4408194
041	BLANK	QC513874	987823	2329297	37358	535198	153971	27508	3401770	2618539	3714163	4376594
042	BS	QC513875	980292	2294157	36633	523014	150274	26905	3357247	2539272	3678660	4393414
043	BSD	QC513876	966173	2273408	36052	518815	149674	26897	3308616	2502721	3661764	4342064
044	MSS	215166-001	918287	2251367	35886	510285	149204	27050	3241258	2466107	3605292	4268322
045	MS	QC513877	914972	2246337	35790	511114	148066	26911	3240442	2373412	3594673	4299640
046	MSD	QC513878	901081	2228532	35244	509458	147507	26560	3212766	2360342	3584451	4276285
047	SAMPLE	215166-002	908858	2205151	34863	494992	144788	26630	3238881	2412748	3563250	4274478
048	SAMPLE	215166-003	895932	2194101	34630	497146	145919	26459	3243533	2386787	3561892	4261321
049	CCV		931621	2227893	35347	505119	143612	26395	3254929	2424950	3608585	4294524
050	CCB		956529	2221371	35991	506687	145937	26495	3319395	2486692	3629058	4303293
051	BLANK	QC514291	947386	2207202	35353	502965	144900	26184	3301307	2487590	3584104	4268233
052	BS	QC514292	940832	2173560	34934	497008	141910	25820	3252850	2469483	3542153	4254461
053	BSD	QC514293	925961	2169544	34680	494481	141639	25866	3232430	2463586	3549500	4238604
054	SER	QC514298	944011	2163196	34847	491107	140717	25640	3268865	2474634	3528755	4253523
055	MS	QC514294	935623	2150590	34098	489155	138986	25340	3223216	2452756	3515639	4216022
056	MSD	QC514295	928038	2147189	34094	486199	138397	25167	3214942	2457335	3494183	4205185
057	PDS	QC514299	922429	2168970	34030	486488	138366	25248	3186112	2407094	3517130	4223468
058	MSS	215255-023	929239	2174757	34460	491418	143228	25715	3262733	2483566	3543911	4257468
059	MS	QC514296	931407	2159812	34478	490929	142584	25760	3271113	2490246	3544982	4232143
060	MSD	QC514297	917628	2163934	34179	487331	141547	25748	3250276	2484283	3520619	4238974
061	CCV		913557	2165285	34021	486156	138672	25152	3162149	2417365	3522857	4229971
062	CCB		942768	2194048	34875	490488	141838	25693	3275338	2480674	3569680	4254650
065	SAMPLE	215255-002	927312	2163743	34290	485582	142030	25568	3285502	2524101	3550195	4256858

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019395179

Date : 10/01/09 Reference : 09j01k00003
Sequence : MET26 09j01k00 Analyzed : 10/01/09 10:36

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
066	SAMPLE	215255-003	922344	2148983	34246	487746	140157	25514	3239472	2486728	3526839	4248870
067	SAMPLE	215255-004	918480	2145947	34127	483639	138654	25320	3228803	2467218	3508029	4212787
068	SAMPLE	215255-005	917757	2155132	34104	486764	138829	25104	3225788	2465284	3500971	4226836
069	SAMPLE	215255-006	921652	2154963	34251	486885	141670	25554	3267461	2525162	3538370	4255972
070	SAMPLE	215255-007	921385	2150112	34361	488194	138946	25190	3251310	2484347	3531871	4262729
071	SAMPLE	215255-008	922071	2154296	34287	487800	139283	25296	3260177	2460049	3520058	4248321
072	SAMPLE	215255-009	926418	2163823	34143	487629	141652	26056	3276600	2546049	3549633	4252744
073	SAMPLE	215255-010	918605	2149822	34346	488766	142204	25984	3264002	2509869	3552075	4245318
074	SAMPLE	215255-011	923545	2151474	33751	489103	140201	25524	3260199	2468086	3517735	4251274
075	CCV		911088	2160441	34487	487601	139177	25543	3195324	2440484	3526487	4257299
076	CCB		938328	2181491	35194	494822	142988	26163	3285301	2489789	3571980	4284014
077	SAMPLE	215255-012	921589	2168119	34679	491002	143922	26248	3298997	2532774	3562935	4284356
078	SAMPLE	215255-013	918440	2172104	34458	490050	141005	25872	3273336	2507420	3544075	4243094
079	SAMPLE	215255-014	916565	2170266	34517	489581	140193	25541	3248633	2498990	3532548	4259467
080	SAMPLE	215255-015	914409	2148810	34392	487816	142885	25783	3274732	2534309	3524200	4235421
081	SAMPLE	215255-016	922488	2142200	34516	488702	142566	25955	3246820	2510005	3593377	4255906
082	SAMPLE	215255-017	912082	2156053	34199	484800	141220	25819	3248140	2489785	3567002	4265939
083	CCV		901393	2158366	34304	488399	139682	25716	3175741	2430941	3503247	4226673
084	CCB		929604	2168275	34963	491842	142285	26336	3278748	2484279	3567573	4277066
085	MSS	215255-001	838084	2280261	36507	502008	134036	25251	2999445	2121521	3496144	3988868
086	SER	QC514298	899990	2207512	35735	503538	140219	25786	3152293	2293337	3533657	4160055
087	MS	QC514294	844813	2303834	37342	511867	135615	25416	3000845	2104494	3530375	4014200
088	MSD	QC514295	842492	2301084	37072	510156	134629	25481	2999235	2093268	3518623	3984343
089	PDS	QC514299	859515	2299564	37520	513662	136571	25427	3010019	2120186	3551145	4006946
090	MSS	215255-023	842515	2229393	36080	498146	137356	25235	3020386	2137913	3480271	4017954
091	MS	QC514296	839871	2234325	35266	492997	134467	25006	3001541	2115716	3446222	3995280
092	MSD	QC514297	837547	2210487	35311	486498	132414	24763	2975720	2103637	3436292	3992255
093	SAMPLE	215255-002	864338	2099738	33738	478600	137928	25440	3114105	2340949	3479897	4104637
094	CCV		869177	2083821	33149	471164	135855	24828	3108457	2350095	3423486	4112383
095	CCB		886255	2051214	33107	468430	137018	25180	3166119	2385586	3427219	4095540
096	ICSA		758689	1974699	32292	462359	129245	24799	2755663	2003785	3239011	3869879
097	ICSAB		710130	1866466	30109	431923	123671	23273	2653729	1934403	3115215	3721905
101	SAMPLE	215255-003	739714	2002896	31485	436639	117261	22077	2690753	1917748	3469978	3602330
102	SAMPLE	215255-004	786777	2059574	32244	434072	118493	22564	2760497	1926778	3219703	3703833
103	SAMPLE	215255-005	791207	2109621	33599	448565	120241	23015	2762260	1892110	3254077	3654193
104	SAMPLE	215255-006	742544	1879890	30106	431974	125698	22976	2861877	2151614	3233726	3743441
105	SAMPLE	215255-007	772416	2037289	32239	436905	118976	22543	2739474	1897926	3187095	3641885
106	SAMPLE	215255-008	779506	2085455	33061	444449	120035	22884	2764953	1884700	3235281	3664905
107	SAMPLE	215255-009	725247	1835361	29682	422892	123812	22881	2831645	2113638	3126618	3699485
108	SAMPLE	215255-010	708717	2002110	31678	439475	116071	22101	2658946	1884084	5138454 *	3626190
109	SAMPLE	215255-011	744462	1993543	31803	424677	116299	22179	2707929	1842750	3117162	3586014
110	CCV		708624	1757978	28163	401863	117971	21588	2723565	2057797	3002014	3602830
111	CCB		689202	1686548	26982	381151	114085	21118	2717767	2075599	2926886	3539992
113	SAMPLE	215255-012	655377	1684065	26617	374592	110261	20611	2628172	1980620	2956332	3492362
114	SAMPLE	215255-013	695575	1886392	29412	403316	110407	20861	2607192	1830859	3011441	3510250
115	SAMPLE	215255-014	720502	1910655	30228	411104	111781	21302	2640311	1833945	3042542	3500410
116	SAMPLE	215255-015	703150	1746358	27827	397431	117678	22022	2748941	2109890	2986783	3588110
117	SAMPLE	215255-016	692765	2251892	35427	487136	112331	22153	2608544	1862573	9263906 *	3731941
118	SAMPLE	215255-017	677205	1996503	31720	435639	109780	21512	2519791	1745851	7026843 *	3549050
119	CCV		708385	1783486	28499	407545	119129	21859	2742701	2045711	3025781	3626893
120	CCB		698297	1714896	27724	388275	115323	21463	2743697	2079107	2951674	3587473
122	MSS	215217-001	680564	1825450	28290	394113	110924	20670	2648051	1897473	3430315	3551958

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019395179

Date : 10/01/09 Reference : 09j01k00003
Sequence : MET26 09j01k00 Analyzed : 10/01/09 10:36

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
123	SER	QC514323	667247	1690113	26853	382272	112904	21047	2653917	1986096	2974769	3519141
124	MS	QC514321	678263	1844295	28234	391661	109577	20794	2644576	1909759	3445512	3563243
125	MSD	QC514322	689408	1851509	28703	397087	110940	20844	2648489	1891369	3436845	3574077
128	PDS	QC514324	662485	1809743	28089	386340	108674	20380	2607123	1878244	3410283	3545960
129	SAMPLE	215217-002	710264	1938983	29929	407292	109977	21217	2649878	1836104	3074310	3576012
130	CCV		707394	1793734	28110	398209	116947	21435	2771593	2090209	3050804	3687941
131	CCB		694891	1728616	27281	385921	115066	21179	2766804	2107449	2983512	3602143
133	BLANK	QC514516	641672	1611882	25467	366794	112328	20642	2623723	2048073	2807091	3455110
134	BS	QC514517	625546	1585481	24966	358054	107916	19960	2574530	2014498	2760855	3412338
135	BSD	QC514518	608487	1550410	24237	348026	106585	19566	2527741	1988013	2707609	3376783
136	MSS	215219-001	587885	1527452	23724	343015	106377	19624	2467017	1901220	2654457	3328947
137	SER	QC514323	608356	1567353	24402	342723	103471	19303	2500814	1924846	2798973	3368273
138	MS	QC514519	588618	1531795	23687	344214	105373	19368	2467244	1901568	2675958	3344782
139	MSD	QC514520	588107	1509412	23652	338572	102213	18915	2448676	1894209	2645591	3313040
140	SAMPLE	215219-002	578586	1485361	23223	333147	102982	18867	2425825	1865899	2606356	3268394
141	CCV		593351	1529561	23492	333844	100270	18913	2481133	1931659	2649473	3330037
142	CCB		606371	1520431	23955	338269	103071	19282	2519282	1975154	2681186	3328227
144	MSS	215210-001	604296	1529680	24009	338515	103583	19370	2504599	1988067	2680307	3340638
145	SAMPLE	215210-004	605011	1547056	24101	340024	103603	19297	2520226	1970138	2700889	3370990
146	SAMPLE	215210-005	604767	1531131	23770	338855	103226	19126	2493221	1952753	2677301	3342636
147	SAMPLE	215210-006	607552	1529891	24045	340076	103690	19064	2498658	1953817	2683741	3353663
148	SAMPLE	215210-007	605877	1548137	24138	342408	104241	19208	2528453	1968462	2701719	3391098
149	SAMPLE	215210-010	607053	1545024	23994	343030	104537	19400	2525892	1977551	2690358	3372991
150	SAMPLE	215210-012	592217	1479989	24349	343839	105204	19545	2425948	1909394	2591802	3251054
151	SAMPLE	215210-013	616983	1562808	24378	342916	105079	19280	2554943	2005166	2741136	3418176
152	BLANK	QC514072	574062	1471771	23461	338070	107582	19665	2473468	1982045	2613629	3306157
153	CCV		581521	1480555	23555	331633	100175	18796	2428526	1913642	2613007	3297981
154	CCB		593437	1485306	24059	334397	102574	19074	2480888	1965069	2617084	3291218
155	SAMPLE	215255-010	579669	1499606	24156	341493	102865	19171	2441779	1903761	2795121	3304979
156	SAMPLE	215255-016	581067	1532848	24555	343845	102006	19013	2450733	1899663	3196105	3335235
157	SAMPLE	215255-017	579149	1509979	24252	342399	102117	18961	2422132	1858899	2997800	3309779
158	CCV		572526	1483649	23697	333435	101064	18804	2427556	1912152	2606449	3281671
159	CCB		585631	1453160	23830	334121	103165	19017	2459348	1951636	2610018	3285302
160	BLANK	QC513899	599001	1581171	23648	332605	102579	19044	2643301	2076134	2819266	3559811
161	ICSA		524164	1451064	23990	339036	99086	19151	2190134	1647395	2522919	3151241
162	ICSAB		444464	1302989	21823	306117	92160	17677	2042742	1553319	2333046	2928225
165	BS	QC513900	395968	1128127	18588	261026	82839	15431	2019999	1672075	2111652	2740197
166	BSD	QC513901	387587	1098021	18185	254371	81233	15200	1981979	1652757	2059664	2688280
167	MSS	215104-002	398237	1127842	18449	253821	80090	15011	1935963	1540846	2087828	2670572
168	SER	QC513904	383905	1078811	17973	252649	80451	15114	1951520	1597694	2056501	2655808
169	MS	QC513902	390066	1117286	18285	252084	79170	14843	1926455	1540763	2070839	2660110
170	MSD	QC513903	390537	1116075	18065	250312	78546	14733	1936343	1529668	2078496	2668071
171	PDS	QC513905	385637	1138855	18483	256057	79515	14875	1940713	1536174	2098058	2700255
172	CCV		364763	1053903	17760	245212	78271	14767	1896755	1567119	2000096	2613520
173	CCB		363210	1034728	17394	241897	77920	14684	1908016	1585422	1978752	2586860
175	SAMPLE	215104-003	371193	1070193	17779	244508	77349	14520	1871781	1495981	1998061	2611891
176	SAMPLE	215104-004	351832	1009986	16836	235620	76985	14511	1877606	1599679	1940629	2553787
177	MS	QC514312	355233	1048543	17289	240639	77342	14619	1896650	1570077	1973458	2609524
178	MSD	QC514313	353298	1037543	17199	240250	76822	14613	1883227	1563405	1973363	2584192
179	MS	QC514314	357023	1056275	17544	240074	77086	14670	1903207	1564570	1994193	2618780
180	MSD	QC514315	355082	1041530	17427	241137	77218	14619	1900058	1550263	1983553	2599796
181	CCV		346788 *	1022041	17190	236764	75512	14297	1844042	1531122	1944610	2556442

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019395179

Date : 10/01/09 Reference : 09j01k00003
Sequence : MET26 09j01k00 Analyzed : 10/01/09 10:36

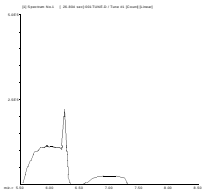
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
182	CCB		349999 *	999379	17067	236431	76214	14415	1858905	1560060	1930765	2512581
183	ICSA		323412 *	1018368	17324	245081	75374	14881	1691569	1343264	1896884	2465445
184	ICSAB		278258 *	911970	15394	215884	68407	13413	1545845	1226830	1716381	2263907

MET26 QC Tune Report

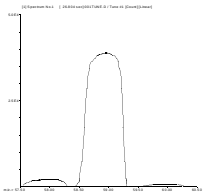
Data File: C:\ICPCHEM\1\DATA\09J01k00.B\001TUNE.D
Date Acquired: Oct 1 2009 10:19 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

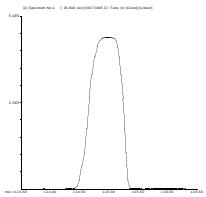
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	138519	138085	137869	138130	0.73	5.00	
59 Co	242906	241593	241511	238987	0.51	5.00	
115 In	2577621	2571914	2550161	2548699	1.00	5.00	
205 Tl	189240	189317	187195	187640	0.84	5.00	



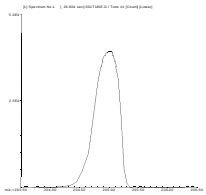
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Water: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019395179001 Date : 01-OCT-2009 10:36
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09j01k00004	1019395179004		01-OCT-2009 10:46	S13065, S13058
L2	09j01k00005	1019395179005		01-OCT-2009 10:57	S13066, S13058
L3	09j01k00006	1019395179006		01-OCT-2009 11:16	S13067, S13058
L4	09j01k00007	1019395179007		01-OCT-2009 11:26	S13068, S13058
L5	09j01k00008	1019395179008		01-OCT-2009 11:36	S13063, S13058
L6	09j01k00009	1019395179009		01-OCT-2009 11:46	S13064, S13058

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0056	0.0044	0.0041	0.0039	0.0039	0.0039	BLNK	-0.7298	259.058		0.0043	1.000	0.995	
Antimony	A	0.0065	0.0026	0.0026	0.0026	0.0027	0.0027	BLNK	-0.0111	375.246		0.0033	1.000	0.995	
Barium	A	0.0015	8.7E-4	8.0E-4	7.6E-4	7.4E-4	7.8E-4	BLNK	-0.0150	1289.16		9.0E-4	0.999	0.995	
Beryllium	A	0.0034	0.0024	0.0022	0.0022	0.0022	0.0022	BLNK	-0.0307	454.659		0.0025	1.000	0.995	
Cadmium	A	8.2E-4	6.5E-4	6.4E-4	6.3E-4	6.3E-4	6.2E-4	BLNK	-0.0146	1607.54		6.7E-4	1.000	0.995	
Calcium	A	9.7E-4	3.3E-4	2.5E-4	1.8E-4	1.7E-4	1.7E-4	BLNK	-32.507	5796.86		3.5E-4	1.000	0.995	
Lead	A	0.0179	0.0074	0.0062	0.0052	0.0051	0.0052	BLNK	-0.2310	194.522		0.0078	1.000	0.995	
Magnesium	A	0.0075	0.0041	0.0035	0.0031	0.0030	0.0030	BLNK	-11.107	336.440		0.0040	1.000	0.995	
Potassium	A	0.0932	0.0229	0.0141	0.0063	0.0055	0.0055	BLNK	-159.57	184.564		0.0246	1.000	0.995	
Silver	A	0.0044	0.0032	0.0030	0.0029	0.0030	0.0030	BLNK	-0.0179	335.052		0.0033	1.000	0.995	
Thallium	A	0.0118	0.0069	0.0062	0.0062	0.0067	0.0067	BLNK	-0.0492	149.502		0.0074	1.000	0.995	
Arsenic	E	0.0059	0.0054	0.0056	0.0052	0.0051	0.0051	BLNK	-0.0288	196.736		0.0054	1.000	0.995	
Chromium	E	0.0838	0.0407	0.0377	0.0326	0.0322	0.0316	BLNK	-0.0856	31.5701		0.0431	1.000	0.995	
Manganese	E	0.0326	0.0178	0.0157	0.0143	0.0141	0.0138	BLNK	-0.0589	72.0765		0.0181	1.000	0.995	
Nickel	E	0.0635	0.0246	0.0201	0.0161	0.0156	0.0152	BLNK	-0.3436	65.6703		0.0258	1.000	0.995	
Sodium	E	0.0796	0.0183	0.0107	0.0044	0.0035	0.0034	BLNK	-223.10	295.200		0.0200	1.000	0.995	
Zinc	E	0.1023	0.0311	0.0191	0.0094	0.0080	0.0077	BLNK	-0.1616	128.683		0.0296	0.999	0.995	
Iron	H	0.0137	0.0084	0.0081	0.0076	0.0075	0.0074	BLNK	-3.7755	134.643		0.0088	1.000	0.995	
Selenium	H	0.0017	9.9E-4	10.0E-4	9.9E-4	9.9E-4	9.7E-4	BLNK	-0.0240	1030.68		0.0011	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	**39**	50.00	14	100.0	5	1000	1	10000	1	20000	0
Antimony	A	0.100	**132**	0.500	-5	1.000	-3	10.00	-4	100.0	1	200.0	0
Barium	A	0.100	**73**	0.500	9	1.000	2	10.00	-2	100.0	-4	200.0	1
Beryllium	A	0.100	**26**	0.500	5	1.000	-1	10.00	2	100.0	0	200.0	0
Cadmium	A	0.100	17	0.500	2	1.000	1	10.00	2	100.0	1	200.0	0
Calcium	A	10.00	**139**	50.00	**28**	100.0	13	1000	3	10000	1	20000	0
Lead	A	0.100	16	0.500	-1	1.000	-2	10.00	0	100.0	-1	200.0	0
Magnesium	A	10.00	**40**	50.00	15	100.0	6	1000	2	10000	1	20000	0
Potassium	A	10.00	**24**	50.00	3	100.0	1	1000	1	10000	1	20000	0
Silver	A	0.100	**31**	0.500	3	1.000	0	10.00	-2	100.0	2	200.0	0
Thallium	A	0.050	**-22**	0.250	-17	0.500	-17	5.000	-9	50.00	0	100.0	0
Arsenic	E	0.100	-12	0.500	1	1.000	8	10.00	2	100.0	1	200.0	0
Chromium	E	0.100	**79**	0.500	11	1.000	10	10.00	2	100.0	2	200.0	0
Manganese	E	0.100	**76**	0.500	16	1.000	7	10.00	2	100.0	2	200.0	0
Nickel	E	0.100	**-27**	0.500	-7	1.000	-3	10.00	2	100.0	2	200.0	-1
Sodium	E	10.00	20	50.00	-6	100.0	-7	1000	6	10000	2	20000	-1
Zinc	E	0.100	**1055**	0.500	**267**	1.000	**129**	10.00	20	100.0	3	200.0	-1
Iron	H	10.00	**47**	50.00	6	100.0	5	1000	2	10000	0	20000	0
Selenium	H	0.100	**49**	0.500	-3	1.000	1	10.00	2	100.0	2	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Water
EPA 6020

Inst : MET26
Calnum : 1019395179001 Cal Date : 01-OCT-2009

ICV 1019395179010 (09j01k00010 01-OCT-2009) stds: S13061, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10320	ug/L	3	10	
Antimony	A	100.0	101.8	ug/L	2	10	
Barium	A	100.0	96.88	ug/L	-3	10	
Beryllium	A	100.0	103.0	ug/L	3	10	
Cadmium	A	100.0	99.94	ug/L	0	10	
Calcium	A	10000	9991	ug/L	0	10	
Lead	A	100.0	100.3	ug/L	0	10	
Magnesium	A	10000	10160	ug/L	2	10	
Potassium	A	10000	10230	ug/L	2	10	
Silver	A	100.0	103.7	ug/L	4	10	
Thallium	A	50.00	50.88	ug/L	2	10	
Arsenic	E	100.0	101.9	ug/L	2	10	
Chromium	E	100.0	101.4	ug/L	1	10	
Manganese	E	100.0	100.1	ug/L	0	10	
Nickel	E	100.0	101.7	ug/L	2	10	
Sodium	E	10000	10320	ug/L	3	10	
Zinc	E	100.0	100.3	ug/L	0	10	
Iron	H	10000	10110	ug/L	1	10	
Selenium	H	100.0	101.9	ug/L	2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179011 File : 09j01k00011 Time : 01-OCT-2009 12:11
Cal : 1019395179001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	1162277	-0.48
Scandium	A	2760193	2718071	-1.53
Scandium	E	43031	42810	-0.51
Scandium	H	622039	621391	-0.10
Germanium	H	171696	171581	-0.07
Germanium	E	30411	30143	-0.88
Indium	A	3793835	3777904	-0.42
Bismuth	A	2792999	2817891	0.89
Yttrium	A	4236755	4195058	-0.98
Terbium	A	4778272	4771604	-0.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179012 File : 09j01k00012 Time : 01-OCT-2009 12:24
Cal : 1019395179001 Caldate : 01-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3332	0.1000	ug/L	!a+
Barium	A	1.481	0.1000	ug/L	!a+
Beryllium	A	[0.02920]	0.1000	ug/L	
Cadmium	A	3.459	0.1000	ug/L	!a+
Lead	A	1.417	0.1000	ug/L	!a+
Silver	A	0.1882	0.1000	ug/L	!a+
Thallium	A	0.09060	0.05000	ug/L	!a+
Arsenic	E	0.3968	0.1000	ug/L	!a+
Chromium	E	1.248	0.1000	ug/L	!a+
Manganese	E	7.251	0.1000	ug/L	!a+
Nickel	E	4.058	0.1000	ug/L	!a+
Zinc	E	7.472	0.1000	ug/L	!a+
Selenium	H	0.2715	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116900	ug/L	117
Calcium	A	300000	346600	ug/L	116
Magnesium	A	100000	112900	ug/L	113
Molybdenum	A	2000	2224	ug/L	111
Potassium	A	100000	115800	ug/L	116
Sodium	E	250000	278000	ug/L	111
Iron	H	250000	274900	ug/L	110

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	955122	-18.21
Scandium	A	2760193	2616065	-5.22
Scandium	E	43031	41765	-2.94
Scandium	H	622039	612704	-1.50
Germanium	H	171696	161206	-6.11
Germanium	E	30411	29805	-1.99
Indium	A	3793835	3258228	-14.12
Bismuth	A	2792999	2377572	-14.87
Yttrium	A	4236755	3976801	-6.14
Terbium	A	4778272	4479674	-6.25

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179013 File : 09j01k00013 Time : 01-OCT-2009 12:34
Cal : 1019395179001 Caldate : 01-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	108700	ug/L	9		
Cadmium	A	100.0	110.3	ug/L	10	20	
Calcium	A	300000	319700	ug/L	7		
Magnesium	A	100000	106000	ug/L	6		
Potassium	A	100000	108300	ug/L	8		
Silver	A	50.00	51.65	ug/L	3	20	
Arsenic	E	100.0	109.9	ug/L	10	20	
Chromium	E	200.0	216.1	ug/L	8	20	
Manganese	E	200.0	217.9	ug/L	9	20	
Nickel	E	200.0	203.4	ug/L	2	20	
Sodium	E	250000	261000	ug/L	4		
Zinc	E	100.0	99.21	ug/L	-1	20	
Iron	H	250000	259400	ug/L	4		
Selenium	H	100.0	109.4	ug/L	9	20	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	622039	594247	-4.47
Scandium	A	2760193	2565164	-7.07
Scandium	E	43031	40398	-6.12
Germanium	H	171696	158820	-7.50
Germanium	E	30411	29241	-3.85
Indium	A	3793835	3254212	-14.22
Yttrium	A	4236755	3935202	-7.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179024 File : 09j01k00024 Time : 01-OCT-2009 14:23
Cal : 1019395179001 Caldate : 01-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0043	0.0039	10000	10230	ug/L	2	10	
Antimony	A	0.0033	0.0027	100.0	103.1	ug/L	3	10	
Barium	A	9.0E-4	7.5E-4	100.0	96.69	ug/L	-3	10	
Beryllium	A	0.0025	0.0022	100.0	101.2	ug/L	1	10	
Cadmium	A	6.7E-4	6.3E-4	100.0	100.7	ug/L	1	10	
Calcium	A	3.5E-4	1.7E-4	10000	9976	ug/L	0	10	
Lead	A	0.0078	0.0051	100.0	99.19	ug/L	-1	10	
Magnesium	A	0.0040	0.0030	10000	10080	ug/L	1	10	
Potassium	A	0.0246	0.0056	10000	10250	ug/L	3	10	
Silver	A	0.0033	0.0031	100.0	104.3	ug/L	4	10	
Thallium	A	0.0074	0.0068	50.00	50.82	ug/L	2	10	
Arsenic	E	0.0054	0.0052	100.0	103.0	ug/L	3	10	
Chromium	E	0.0431	0.0317	100.0	100.1	ug/L	0	10	
Manganese	E	0.0181	0.0140	100.0	100.8	ug/L	1	10	
Nickel	E	0.0258	0.0153	100.0	100.1	ug/L	0	10	
Sodium	E	0.0200	0.0035	10000	10210	ug/L	2	10	
Zinc	E	0.0296	0.0078	100.0	100.6	ug/L	1	10	
Iron	H	0.0088	0.0076	10000	10240	ug/L	2	10	
Selenium	H	0.0011	10.0E-4	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	1094936	-6.24
Scandium	A	2760193	2602552	-5.71
Scandium	E	43031	41007	-4.70
Scandium	H	622039	592424	-4.76
Germanium	H	171696	162404	-5.41
Germanium	E	30411	29160	-4.11
Indium	A	3793835	3556655	-6.25
Bismuth	A	2792999	2660563	-4.74
Yttrium	A	4236755	4021817	-5.07
Terbium	A	4778272	4630551	-3.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179025 File : 09j01k00025 Time : 01-OCT-2009 14:33
Cal : 1019395179001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	1117241	-4.33
Scandium	A	2760193	2578438	-6.58
Scandium	E	43031	41876	-2.68
Scandium	H	622039	592532	-4.74
Germanium	H	171696	164872	-3.97
Germanium	E	30411	29404	-3.31
Indium	A	3793835	3637080	-4.13
Bismuth	A	2792999	2690712	-3.66
Yttrium	A	4236755	4032280	-4.83
Terbium	A	4778272	4624008	-3.23

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179029 File : 09j01k00029 Time : 01-OCT-2009 15:14
Cal : 1019395179001 Caldate : 01-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0043	0.0039	10000	10220	ug/L	2	10	
Antimony	A	0.0033	0.0027	100.0	103.0	ug/L	3	10	
Barium	A	9.0E-4	7.4E-4	100.0	95.66	ug/L	-4	10	
Beryllium	A	0.0025	0.0022	100.0	100.9	ug/L	1	10	
Cadmium	A	6.7E-4	6.2E-4	100.0	100.1	ug/L	0	10	
Calcium	A	3.5E-4	1.7E-4	10000	10030	ug/L	0	10	
Lead	A	0.0078	0.0051	100.0	98.87	ug/L	-1	10	
Magnesium	A	0.0040	0.0030	10000	10120	ug/L	1	10	
Potassium	A	0.0246	0.0056	10000	10230	ug/L	2	10	
Silver	A	0.0033	0.0031	100.0	102.8	ug/L	3	10	
Thallium	A	0.0074	0.0068	50.00	50.77	ug/L	2	10	
Arsenic	E	0.0054	0.0052	100.0	103.0	ug/L	3	10	
Chromium	E	0.0431	0.0318	100.0	100.4	ug/L	0	10	
Manganese	E	0.0181	0.0141	100.0	101.3	ug/L	1	10	
Nickel	E	0.0258	0.0153	100.0	100.4	ug/L	0	10	
Sodium	E	0.0200	0.0036	10000	10270	ug/L	3	10	
Zinc	E	0.0296	0.0078	100.0	100.8	ug/L	1	10	
Iron	H	0.0088	0.0076	10000	10210	ug/L	2	10	
Selenium	H	0.0011	9.8E-4	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	1080664	-7.46
Scandium	A	2760193	2528928	-8.38
Scandium	E	43031	40204	-6.57
Scandium	H	622039	581604	-6.50
Germanium	H	171696	160189	-6.70
Germanium	E	30411	28715	-5.58
Indium	A	3793835	3514947	-7.35
Bismuth	A	2792999	2647655	-5.20
Yttrium	A	4236755	3946692	-6.85
Terbium	A	4778272	4603626	-3.66

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179030 File : 09j01k00030 Time : 01-OCT-2009 15:24
Cal : 1019395179001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	1115722	-4.46
Scandium	A	2760193	2520302	-8.69
Scandium	E	43031	40945	-4.85
Scandium	H	622039	581683	-6.49
Germanium	H	171696	162530	-5.34
Germanium	E	30411	29236	-3.86
Indium	A	3793835	3585787	-5.48
Bismuth	A	2792999	2689458	-3.71
Yttrium	A	4236755	3960657	-6.52
Terbium	A	4778272	4629505	-3.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179031 File : 09j01k00031 Time : 01-OCT-2009 15:34
Cal : 1019395179001 Caldate : 01-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3104	0.1000	ug/L	!a+
Barium	A	1.503	0.1000	ug/L	!a+
Beryllium	A	[0.03140]	0.1000	ug/L	
Cadmium	A	3.465	0.1000	ug/L	!a+
Lead	A	1.393	0.1000	ug/L	!a+
Silver	A	0.1993	0.1000	ug/L	!a+
Thallium	A	0.08130	0.05000	ug/L	!a+
Arsenic	E	0.4298	0.1000	ug/L	!a+
Chromium	E	1.259	0.1000	ug/L	!a+
Manganese	E	7.151	0.1000	ug/L	!a+
Nickel	E	4.035	0.1000	ug/L	!a+
Zinc	E	7.321	0.1000	ug/L	!a+
Selenium	H	0.2258	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116900	ug/L	117
Calcium	A	300000	344900	ug/L	115
Magnesium	A	100000	112900	ug/L	113
Molybdenum	A	2000	2244	ug/L	112
Potassium	A	100000	116300	ug/L	116
Sodium	E	250000	276000	ug/L	110
Iron	H	250000	263800	ug/L	106

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1167826	952141	-18.47
Scandium	A	2760193	2480787	-10.12
Scandium	E	43031	40725	-5.36
Scandium	H	622039	616030	-0.97
Germanium	H	171696	160092	-6.76
Germanium	E	30411	29647	-2.51
Indium	A	3793835	3183246	-16.09
Bismuth	A	2792999	2288666	-18.06
Yttrium	A	4236755	3804464	-10.20
Terbium	A	4778272	4365303	-8.64

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Water
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019395179032 File : 09j01k00032 Time : 01-OCT-2009 15:44
Cal : 1019395179001 Caldate : 01-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	107700	ug/L	8		
Cadmium	A	100.0	109.9	ug/L	10	20	
Calcium	A	300000	320000	ug/L	7		
Magnesium	A	100000	104800	ug/L	5		
Potassium	A	100000	107900	ug/L	8		
Silver	A	50.00	51.38	ug/L	3	20	
Arsenic	E	100.0	111.0	ug/L	11	20	
Chromium	E	200.0	213.7	ug/L	7	20	
Manganese	E	200.0	221.2	ug/L	11	20	
Nickel	E	200.0	199.8	ug/L	0	20	
Sodium	E	250000	258100	ug/L	3		
Zinc	E	100.0	98.60	ug/L	-1	20	
Iron	H	250000	259900	ug/L	4		
Selenium	H	100.0	108.8	ug/L	9	20	

ISTD (ICALBLK 09j01k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	622039	569664	-8.42
Scandium	A	2760193	2421033	-12.29
Scandium	E	43031	39381	-8.48
Germanium	H	171696	154336	-10.11
Germanium	E	30411	28612	-5.92
Indium	A	3793835	3136842	-17.32
Yttrium	A	4236755	3752391	-11.43

SAMPLE PREPARATION SUMMARY

Batch # : 155316
Started By : VV
Method : 200.8
Spike #1 ID : S12256

Prep Date : 25-SEP-2009 12:15
Spike #2 ID : S12257

Analysis : ICAP
Finished By : VV
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215072-005		Water	50	50	1	1.0						TAL/ICP	
215072-010		Water	50	50	1	1.0						TAL/ICP	
215072-011		Water	50	50	1	1.0						TAL/ICP	
QC513667	BLANK	Water	50	50	1	1.0							
QC513668	BS	Water	50	50	1	1.0		.25	.25				
QC513669	BSD	Water	50	50	1	1.0		.25	.25				
QC513670	MS	Water	50	50	1	1.0		.25	.25				
QC513671	MSD	Water	50	50	1	1.0		.25	.25				
QC513672	PDS	Water	50	50	1	1.0							
QC513673	SER	Water	50	50	1	1.0							

Reviewed by: JYF Date: 10/01/09

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 155316
Digested by: VV
Date Digested: 9-25-09

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ EPA 3005A for ICP-MS
☐ _____

bk2886
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK 513667	BC	50	50	N	
* BS 8					
* BSD 9					
* 215072-005 MS	D				
* -005 MSD					
-005					
-010					
-011	E				

	Reagent ID or LIMS #	Initials / Date
Digestion tubes, lot #	J79414-261	
0.25 mL of spike solution (Std1) was added to all spikes	S12256 *	VV 9-25-09
0.25 mL of spike solution (Std2) was added to all spikes	S12257 *	
digestion temperature (90-95 degrees C)	95°C	
digestion begun at (time)	12:15 PM	
concentrated HCl	H19031 - JT Baker	
concentrated HNO3	H12027	
digestion ended at (time)	6 PM	
☐ filtered thru' Whatman # 541		
Relinquished to ICP group		

VV 9-25-09
Prep Chemist / Date

Continued from page 9
Continued on page 9

Michael Cusick 9/25/09
Reviewed by / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 849391039

Instrument : MET14 Begun : 09/28/09 13:19
Method : EPA 7470A SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	155369	ICALBLK	STD01REP1			09/28/09 13:19	1.0		
002	155369	ICAL	STD02REP1			09/28/09 13:21	1.0	1	
003	155369	ICAL	STD03REP1			09/28/09 13:23	1.0	1	
004	155369	ICAL	STD04REP1			09/28/09 13:26	1.0	1	
005	155369	ICAL	STD05REP1			09/28/09 13:28	1.0	1	
006	155369	ICAL	STD06REP1			09/28/09 13:30	1.0	1	
007	155369	ICV				09/28/09 13:40	1.0	2	
008	155369	ICB				09/28/09 13:42	1.0		
009	155369	BLANK	QC513911	Water	155369	09/28/09 13:44	1.0		
010	155369	BS	QC513912	Water	155369	09/28/09 13:46	1.0		
011	155369	BSD	QC513913	Water	155369	09/28/09 13:52	1.0		
012	155369	MSS	215072-005	Water	155369	09/28/09 13:54	1.0		
013	155369	MS	QC513914	Water	155369	09/28/09 13:56	1.0		
014	155369	MSD	QC513915	Water	155369	09/28/09 13:59	1.0		
015	155369	SER	QC513916	Water	155369	09/28/09 14:01	5.0		
016	155369	SAMPLE	215072-010	Water	155369	09/28/09 14:03	1.0		
017	155369	SAMPLE	215072-011	Water	155369	09/28/09 14:05	1.0		
018	155369	SAMPLE	215166-001	Water	155369	09/28/09 14:08	1.0		
019	155369	CCV				09/28/09 14:10	1.0	3	
020	155369	CCB				09/28/09 14:12	1.0		
021	155369	SAMPLE	215166-002	Water	155369	09/28/09 14:14	1.0		
022	155369	SAMPLE	215166-003	Water	155369	09/28/09 14:17	1.0		
023	155369	SAMPLE	215166-004	Water	155369	09/28/09 14:19	1.0		
024	155369	SAMPLE	215166-005	Water	155369	09/28/09 14:21	1.0		
025	155369	SAMPLE	215166-006	Water	155369	09/28/09 14:23	1.0		
026	155369	SAMPLE	215166-007	Water	155369	09/28/09 14:25	1.0		
027	155369	SAMPLE	215166-008	Water	155369	09/28/09 14:27	1.0		
028	155369	SAMPLE	215166-013	Water	155369	09/28/09 14:30	1.0		
029	155369	SAMPLE	215166-014	Water	155369	09/28/09 14:32	1.0		
030	155369	SAMPLE	215166-015	Water	155369	09/28/09 14:34	1.0		
031	155369	CCV				09/28/09 14:36	1.0	3	
032	155369	CCB				09/28/09 14:38	1.0		
033	155369	SAMPLE	215210-001	Water	155369	09/28/09 14:41	1.0		
034	155369	SAMPLE	215210-002	Water	155369	09/28/09 14:43	1.0		
035	155369	SAMPLE	215210-003	Water	155369	09/28/09 14:45	1.0		
036	155369	SAMPLE	215210-004	Water	155369	09/28/09 14:47	1.0		
037	155369	SAMPLE	215210-005	Water	155369	09/28/09 14:49	1.0		
038	155369	SAMPLE	215210-006	Water	155369	09/28/09 14:52	1.0		
039	155369	CCV				09/28/09 15:14	1.0	3	
040	155369	CCB				09/28/09 15:16	1.0		

WNH 09/28/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 40.

Standards used: 1=S13028 2=S13030 3=S13031

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Water: EPA 7470A

Inst : MET14
Calnum : 849391039001
Units : ug/L

Date : 28-SEP-2009 13:19
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	155369	849391039002	STD02REP1	28-SEP-2009 13:21	S13028 (500X)
L2	155369	849391039003	STD03REP1	28-SEP-2009 13:23	S13028 (200X)
L3	155369	849391039004	STD04REP1	28-SEP-2009 13:26	S13028 (50X)
L4	155369	849391039005	STD05REP1	28-SEP-2009 13:28	S13028 (20X)
L5	155369	849391039006	STD06REP1	28-SEP-2009 13:30	S13028 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	6040.0	4890.0	4520.5	4555.2	4508.3	LINR	-0.0784	2.24E-4		4902.8	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-4	0.500	-6	2.000	-3	5.000	0	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Water
EPA 7470A

Inst : MET14
Calnum : 849391039001 Cal Date : 28-SEP-2009 Type : WATER

ICV 849391039007 (28-SEP-2009) stds: S13030

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.940	ug/L	-1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849391039008 File : 155369 Time : 28-SEP-2009 13:42
Cal : 849391039001 Caldate : 28-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849391039019 File : 155369 Time : 28-SEP-2009 14:10
Cal : 849391039001 Caldate : 28-SEP-2009 Caltype : WATER
Standards: S13031

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	4902.8	4521.8	5.000	4.980	ug/L	0	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Water
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849391039020 File : 155369 Time : 28-SEP-2009 14:12
Cal : 849391039001 Caldate : 28-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 155369
Started By : WNH
Method : METHOD
Spike #1 ID : S13028

Prep Date : 28-SEP-2009 09:58

Analysis : HG
Finished By : WNH
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215072-005		Water	50	50	1	1.0						TAL/HG	
215072-010		Water	50	50	1	1.0						TAL/HG	
215072-011		Water	50	50	1	1.0						TAL/HG	
215166-001		Water	50	50	1	1.0						TAL/HG	
215166-002		Water	50	50	1	1.0						TAL/HG	
215166-003		Water	50	50	1	1.0						TAL/HG	
215166-004		Water	50	50	1	1.0						TAL/HG	
215166-005		Water	50	50	1	1.0						TAL/HG	
215166-006		Water	50	50	1	1.0						TAL/HG	
215166-007		Water	50	50	1	1.0						TAL/HG	
215166-008		Water	50	50	1	1.0						TAL/HG	
215166-013		Water	50	50	1	1.0						TAL/HG	
215166-014		Water	50	50	1	1.0						TAL/HG	
215166-015		Water	50	50	1	1.0						TAL/HG	
215210-001		Water	50	50	1	1.0						TAL/HG	
215210-002		Water	50	50	1	1.0						TAL/HG	
215210-003		Water	50	50	1	1.0						TAL/HG	
215210-004		Water	50	50	1	1.0						TAL/HG	
215210-005		Water	50	50	1	1.0						TAL/HG	
215210-006		Water	50	50	1	1.0						TAL/HG	
QC513911	BLANK	Water	50	50	1	1.0							
QC513912	BS	Water	50	50	1	1.0		1.25					
QC513913	BSD	Water	50	50	1	1.0		1.25					
QC513914	MS	Water	50	50	1	1.0		1.25					
QC513915	MSD	Water	50	50	1	1.0		1.25					
QC513916	SER	Water	50	50	1	1.0							

Reviewed by: WNH Date: 09/28/09

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 155369
Date Digested: 9/28/09

Digestion Method
☑ EPA 7470A/ EPA 245.1
☐ _____

BK2911
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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
215072-005	E	50	50	N	MSS
10	E				
11	D				
215166-001	G				
2					
3					
4					
5					
6					
7					
8					
13					
14					
15					
215210-001	C				
2	G				
3					
4					
5					
6					
Blank QC513911					
BS 2					
BSD 3					
MS 4	E				
MSD 5	E				

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	EK 09167	9/28/09
1.25 mL of spike solution was added to all spikes	513028	
ICAL Source LIMS S#	513029	
ICV / CCV LIMS S#	513030 / 513031	
Digestion Temperature (degrees C)	95°	
Digestion Started at (time)	0958	
concentrated H_2SO_4	635026	
concentrated HNO_3	H12022	
5% $KMnO_4$	092209	
5% $K_2S_2O_8$	062209	
NaCl.hydroxylamine hydrochloride	090209	
Stannous Chloride	092109	
Digestion Completed at (time)	1158	
☐ filtered thru' 0.45 um syringe filter (lot #)		

9/28/09
Prep Chemist / Date

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9/28/09
Reviewed by / Date

Laboratory Job Number 215072

ANALYTICAL REPORT

Metals

Matrix: Filtrate

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS		
Field ID:	ASE-72B-9C1	Units:	ug/L
Lab ID:	215072-005	Sampled:	09/17/09
Matrix:	Filtrate	Received:	09/19/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Antimony	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Arsenic	3.9	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Barium	64	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Beryllium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Boron	1,400	100	1.000	155517	09/30/09	10/01/09	EPA 6010B	
Cadmium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Calcium	72,000	50	5.000	155517	09/30/09	10/02/09	EPA 6020	B7 D2
Chromium	2.8	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Iron	680	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Lead	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Magnesium	24,000	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Manganese	15	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Mercury	ND	0.20	1.000	155246	09/24/09	09/24/09	EPA 7470A	
Nickel	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Potassium	5,900	500	50.00	155517	09/30/09	10/02/09	EPA 6020	D1
Selenium	1.6	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Silver	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Sodium	210,000	500	50.00	155517	09/30/09	10/02/09	EPA 6020	D1
Thallium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Zinc	5.5	5.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS		
Field ID:	ASE-49B-9C1	Units:	ug/L
Lab ID:	215072-010	Sampled:	09/17/09
Matrix:	Filtrate	Received:	09/19/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Antimony	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Arsenic	7.7	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Barium	55	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Beryllium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Boron	820	100	1.000	155517	09/30/09	10/01/09	EPA 6010B	
Cadmium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Calcium	41,000	50	5.000	155517	09/30/09	10/02/09	EPA 6020	B7 D2
Chromium	1.9	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Iron	ND	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Lead	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Magnesium	14,000	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Manganese	1.7	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Mercury	ND	0.20	1.000	155246	09/24/09	09/24/09	EPA 7470A	
Nickel	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Potassium	4,800	500	50.00	155517	09/30/09	10/02/09	EPA 6020	D1
Selenium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Silver	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Sodium	190,000	500	50.00	155517	09/30/09	10/02/09	EPA 6020	D1
Thallium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Zinc	ND	5.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS		
Field ID:	PZ-1B-9C1	Units:	ug/L
Lab ID:	215072-011	Sampled:	09/17/09
Matrix:	Filtrate	Received:	09/19/09

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Antimony	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Arsenic	6.9	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Barium	43	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Beryllium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Boron	1,900	100	1.000	155517	09/30/09	10/01/09	EPA 6010B	
Cadmium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Calcium	71,000	50	5.000	155517	09/30/09	10/02/09	EPA 6020	B7 D2
Chromium	3.5	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Iron	ND	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Lead	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Magnesium	25,000	50	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Manganese	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Mercury	ND	0.20	1.000	155246	09/24/09	09/24/09	EPA 7470A	
Nickel	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Potassium	5,600	500	50.00	155517	09/30/09	10/02/09	EPA 6020	D1
Selenium	4.8	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Silver	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Sodium	280,000	500	50.00	155517	09/30/09	10/02/09	EPA 6020	D1
Thallium	ND	1.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2
Zinc	ND	5.0	5.000	155517	09/30/09	10/02/09	EPA 6020	D2

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	155246
Lab ID:	QC513410	Prepared:	09/24/09
Matrix:	Water	Analyzed:	09/24/09
Units:	ug/L		

Result	RL	ADEQ Flags
ND	0.20	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	155246
Matrix:	Water	Prepared:	09/24/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
BS	QC513411	2.500	2.530	101	80-120			
BSD	QC513412	2.500	2.520	101	80-120	0	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	155246
Field ID:	ZZZZZZZZZZ	Sampled:	09/23/09
MSS Lab ID:	215133-001	Received:	09/23/09
Matrix:	Filtrate	Prepared:	09/24/09
Units:	ug/L	Analyzed:	09/24/09
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC513413	<0.03335	2.500	2.590	104	80-120			
MSD	QC513414		2.500	2.570	103	80-120	1	20	

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	155246
MSS Lab ID:	215133-001	Sampled:	09/23/09
Lab ID:	QC513415	Received:	09/23/09
Matrix:	Filtrate	Analyzed:	09/24/09

MSS Result	MSS RL	Result	RL	% Diff	Lim	ADEQ Flags
ND	0.2000	ND	1.000	NC	10	

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS		
Type:	BLANK	Units:	ug/L
Lab ID:	QC514509	Batch#:	155517
Matrix:	Filtrate	Prepared:	09/30/09

Analyte	Result	RL	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	ND	50	5.000	10/02/09	EPA 6020	D1
Antimony	ND	1.0	5.000	10/02/09	EPA 6020	D1
Arsenic	ND	1.0	5.000	10/02/09	EPA 6020	D1
Barium	ND	1.0	5.000	10/02/09	EPA 6020	D1
Beryllium	ND	1.0	5.000	10/02/09	EPA 6020	D1
Boron	ND	100	1.000	10/01/09	EPA 6010B	
Cadmium	ND	1.0	5.000	10/02/09	EPA 6020	D1
Calcium	67 b	50	5.000	10/02/09	EPA 6020	B1 D1
Chromium	ND	1.0	5.000	10/02/09	EPA 6020	D1
Iron	ND	50	5.000	10/02/09	EPA 6020	D1
Lead	ND	1.0	5.000	10/02/09	EPA 6020	D1
Magnesium	ND	50	5.000	10/02/09	EPA 6020	D1
Manganese	ND	1.0	5.000	10/02/09	EPA 6020	D1
Nickel	ND	1.0	5.000	10/02/09	EPA 6020	D1
Potassium	ND	50	5.000	10/02/09	EPA 6020	D1
Selenium	ND	1.0	5.000	10/02/09	EPA 6020	D1
Silver	ND	1.0	5.000	10/02/09	EPA 6020	D1
Sodium	ND	50	5.000	10/02/09	EPA 6020	D1
Thallium	ND	1.0	5.000	10/02/09	EPA 6020	D1
Zinc	ND	5.0	5.000	10/05/09	EPA 6020	D1

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS		
Matrix:	Filtrate	Batch#:	155517
Units:	ug/L	Prepared:	09/30/09

Type: BS Lab ID: QC514510

Analyte	Spiked	Result	%REC	Limits	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	8,560	86	78-120	5.000	10/02/09	EPA 6020	D1
Antimony	100.0	86.30	86	80-120	5.000	10/02/09	EPA 6020	D1
Arsenic	100.0	90.60	91	88-120	5.000	10/02/09	EPA 6020	D1
Barium	100.0	90.00	90	90-120	5.000	10/02/09	EPA 6020	D1
Beryllium	100.0	90.25	90	89-120	5.000	10/02/09	EPA 6020	D1
Boron	1,000	1,026	103	80-120	1.000	10/01/09	EPA 6010B	
Cadmium	100.0	88.75	89	88-120	5.000	10/02/09	EPA 6020	D1
Calcium	10,000	8,735	87	80-120	5.000	10/02/09	EPA 6020	D1
Chromium	100.0	90.00	90	90-120	5.000	10/02/09	EPA 6020	D1
Iron	10,000	9,830	98	89-120	5.000	10/02/09	EPA 6020	D1
Lead	100.0	88.65	89	89-120	5.000	10/02/09	EPA 6020	D1
Magnesium	10,000	8,440	84	77-120	5.000	10/02/09	EPA 6020	D1
Manganese	100.0	92.40	92	90-120	5.000	10/02/09	EPA 6020	D1
Nickel	100.0	88.60	89	89-120	5.000	10/02/09	EPA 6020	D1
Potassium	10,000	9,195	92	80-120	5.000	10/02/09	EPA 6020	D1
Selenium	100.0	93.85	94	90-120	5.000	10/02/09	EPA 6020	D1
Silver	100.0	85.95	86	86-120	5.000	10/02/09	EPA 6020	D1
Sodium	10,000	9,375	94	80-120	5.000	10/02/09	EPA 6020	D1
Thallium	50.00	43.29	87	80-120	5.000	10/02/09	EPA 6020	D1
Zinc	100.0	87.15	87	79-120	5.000	10/02/09	EPA 6020	D1

Type: BSD Lab ID: QC514511

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed	Analysis	ADEQ Flags
Aluminum	10,000	8,770	88	78-120	2	20	5.000	10/02/09	EPA 6020	D1
Antimony	100.0	88.30	88	80-120	2	20	5.000	10/02/09	EPA 6020	D1
Arsenic	100.0	91.45	91	88-120	1	20	5.000	10/02/09	EPA 6020	D1
Barium	100.0	92.45	92	90-120	3	20	5.000	10/02/09	EPA 6020	D1
Beryllium	100.0	91.90	92	89-120	2	20	5.000	10/02/09	EPA 6020	D1
Boron	1,000	1,068	107	80-120	4	20	1.000	10/01/09	EPA 6010B	
Cadmium	100.0	90.00	90	88-120	1	20	5.000	10/02/09	EPA 6020	D1
Calcium	10,000	8,895	89	80-120	2	20	5.000	10/02/09	EPA 6020	D1
Chromium	100.0	90.55	91	90-120	1	20	5.000	10/02/09	EPA 6020	D1
Iron	10,000	10,030	100	89-120	2	20	5.000	10/02/09	EPA 6020	D1
Lead	100.0	90.00	90	89-120	2	20	5.000	10/02/09	EPA 6020	D1
Magnesium	10,000	8,645	86	77-120	2	20	5.000	10/02/09	EPA 6020	D1
Manganese	100.0	93.05	93	90-120	1	20	5.000	10/02/09	EPA 6020	D1
Nickel	100.0	90.50	91	89-120	2	20	5.000	10/02/09	EPA 6020	D1
Potassium	10,000	9,265	93	80-120	1	20	5.000	10/02/09	EPA 6020	D1
Selenium	100.0	92.45	92	90-120	2	20	5.000	10/02/09	EPA 6020	D1
Silver	100.0	88.30	88	86-120	3	20	5.000	10/02/09	EPA 6020	D1
Sodium	10,000	9,445	94	80-120	1	20	5.000	10/02/09	EPA 6020	D1
Thallium	50.00	43.67	87	80-120	1	20	5.000	10/02/09	EPA 6020	D1
Zinc	100.0	89.15	89	79-120	2	20	5.000	10/02/09	EPA 6020	D1

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Sampled:	09/28/09
MSS Lab ID:	215256-001	Received:	09/28/09
Matrix:	Filtrate	Prepared:	09/30/09
Units:	ug/L	Analyzed:	10/02/09
Batch#:	155517		

Type: MS Lab ID: QC514512

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	ADEQ Flags
Aluminum	210,500	10,000	206,800	-37 NM	75-120	500.0	D2 M2 M3
Antimony	0.2495	100.0	88.75	89	76-120	5.000	D2
Arsenic	14.69	100.0	105.0	90	84-124	5.000	D2
Barium	115.9	100.0	198.0	82 *	85-120	5.000	D2 M2
Beryllium	52.05	100.0	137.2	85	79-121	5.000	D2
Cadmium	11.07	100.0	91.95	81 *	82-120	5.000	D2 M2
Calcium	493,600	10,000	470,100	-235 NM	69-123	500.0	D2 M2 M3
Chromium	670.0	100.0	727.0	57 NM	73-135	500.0	D2 M2 M3
Iron	20,210	10,000	27,030	68	52-155	5.000	D2
Lead	2.946	100.0	80.15	77 *	89-121	5.000	D2 M2
Magnesium	537,000	10,000	541,000	40 NM	66-123	500.0	D2 M2 M3
Manganese	16,650	100.0	16,220	-435 NM	79-121	500.0	D2 M2 M3
Nickel	5,125	100.0	4,754	-371 NM	84-120	500.0	D2 M2 M3
Potassium	160,000	10,000	162,900	29 NM	76-120	500.0	D2 M2 M3
Selenium	3.156	100.0	117.8	115	71-140	5.000	D2
Silver	0.5390	100.0	74.20	74 *	75-141	5.000	D2 M2
Sodium	6,731,000	10,000	6,280,000	-4510 NM	61-128	500.0	D2 M2 M3
Thallium	<0.03200	50.00	45.35	91	70-120	5.000	D2
Zinc	931.5	100.0	783.0	-149 NM	61-124	5.000	D2 M2 M3

Type: MSD Lab ID: QC514513

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	ADEQ Flags
Aluminum	10,000	202,800	-78 NM	75-120	2	20	500.0	D2 M2 M3
Antimony	100.0	90.00	90	76-120	1	20	5.000	D2
Arsenic	100.0	107.7	93	84-124	3	20	5.000	D2
Barium	100.0	201.9	86	85-120	2	20	5.000	D2
Beryllium	100.0	140.2	88	79-121	2	20	5.000	D2
Cadmium	100.0	93.50	82	82-120	2	20	5.000	D2
Calcium	10,000	376,600 >LR	-1170 NM	69-123	NC	24	5.000	D2 M2 M3
Chromium	100.0	702.5	33 NM	73-135	3	20	500.0	D2 M2 M3
Iron	10,000	27,500	73	52-155	2	20	5.000	D2
Lead	100.0	81.65	79 *	89-121	2	20	5.000	D2 M2
Magnesium	10,000	402,500 >LR	-1346 NM	66-123	NC	20	5.000	D2 M2 M3
Manganese	100.0	16,020	-630 NM	79-121	1	20	500.0	D2 M2 M3
Nickel	100.0	4,805	-320 NM	84-120	1	20	500.0	D2 M2 M3
Potassium	10,000	162,400	24 NM	76-120	0	20	500.0	D2 M2 M3
Selenium	100.0	123.1	120	71-140	4	20	5.000	D2
Silver	100.0	75.45	75	75-141	2	20	5.000	D2
Sodium	10,000	6,185,000	-5460 NM	61-128	2	20	500.0	D2 M2 M3
Thallium	50.00	45.69	91	70-120	1	20	5.000	D2
Zinc	100.0	788.5	-143 NM	61-124	1	30	5.000	D2 M2 M3

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	155517
MSS Lab ID:	215256-001	Sampled:	09/28/09
Lab ID:	QC514514	Received:	09/28/09
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed	ADEQ Flags
Aluminum	210,500	500.0	213,900	2,500	2	10	250.0	10/02/09	
Antimony	0.2495	1.000	ND	2.500	NC	10	25.00	10/02/09	
Arsenic	14.69	1.000	15.41	2.500	5	10	25.00	10/02/09	
Barium	115.9	1.000	118.8	2.500	3	10	25.00	10/02/09	
Beryllium	52.05	1.000	51.95	2.500	0	10	25.00	10/02/09	
Boron			NA						
Cadmium	11.07	1.000	11.34	2.500	2	10	25.00	10/02/09	
Calcium	493,600	500.0	489,800	2,500	1	10	250.0	10/02/09	B7
Chromium	670.0	6.000	674.0	30.00	1	10	250.0	10/02/09	
Iron	20,210	50.00	26,030	250.0	29 *	10	25.00	10/02/09	
Lead	2.946	1.000	3.268	2.500	NC	10	25.00	10/02/09	
Magnesium	537,000	5,000	551,300	25,000	3	10	2,500	10/02/09	
Manganese	16,650	50.00	16,360	250.0	2	10	2,500	10/02/09	
Nickel	5,125	5.584	5,143	27.92	0	10	250.0	10/02/09	
Potassium	160,000	500.0	160,800	2,500	1	10	250.0	10/02/09	
Selenium	3.156	1.000	ND	2.500	NC	10	25.00	10/05/09	
Silver	0.5390	1.000	0.5500 J	2.500	NC	10	25.00	10/02/09	E4
Sodium	6,731,000	10,000	7,080,000	50,000	5	10	5,000	10/02/09	
Thallium	ND	1.000	ND	1.250	NC	10	25.00	10/05/09	
Zinc	931.5	20.64	895.5	103.2	4	10	250.0	10/02/09	

*= Value outside of QC limits; see narrative
J= Estimated value
NA= Not Analyzed
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Post Digest Spike	Batch#:	155517
MSS Lab ID:	215256-001	Sampled:	09/28/09
Lab ID:	QC514515	Received:	09/28/09
Matrix:	Filtrate	Analyzed:	10/02/09

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	ADEQ Flags
Aluminum	210,500	500,000	666,500	91	75-125	50.00	D2
Antimony	0.2495	500.0	454.8	91	75-125	5.000	D2
Arsenic	14.69	500.0	525.5	102	75-125	5.000	D2
Barium	115.9	500.0	585.5	94	75-125	5.000	D2
Beryllium	52.05	500.0	531.5	96	75-125	5.000	D2
Cadmium	11.07	500.0	443.8	87	75-125	5.000	D2
Calcium	493,600	500,000	928,500	87	75-125	50.00	D2
Chromium	670.0	5,000	5,240	91	75-125	50.00	D2
Iron	20,210	50,000	60,500	81	75-125	5.000	D2
Lead	2.946	500.0	409.6	81	75-125	5.000	D2
Magnesium	537,000	5,000,000	4,993,000	89	75-125	500.0	D2
Manganese	16,650	50,000	63,650	94	75-125	500.0	D2
Nickel	5,125	5,000	9,295	83	75-125	50.00	D2
Potassium	160,000	500,000	618,500	92	75-125	50.00	D2
Selenium	3.156	500.0	636.5	127 *	75-125	5.000	D2
Silver	0.5390	500.0	422.8	84	75-125	5.000	D2
Sodium	6,731,000	10,000,000	16,320,000	96	75-125	1,000	D2
Thallium	<0.03200	250.0	235.7	94	75-125	5.000	D2
Zinc	931.5	5,000	5,410	90	75-125	50.00	D2

*= Value outside of QC limits; see narrative

REPORTING SUMMARY FOR 215072 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALK	SBS	ABA	BBE	BCD	CCA	CCR	FEB	PBG	MGN	MGN	HGI	NK	SE	AG	NA	TL	ZN
215072-005	MET14	09/24/09 12:31	1.0												+						
215072-005	MET08	10/01/09 17:13	1.0				+														
215072-005	MET16	10/02/09 05:22	50.0													+			+		
215072-005	MET16	10/02/09 07:28	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+		+	+
215072-010	MET14	09/24/09 12:34	1.0												+						
215072-010	MET08	10/01/09 17:18	1.0				+														
215072-010	MET16	10/02/09 05:33	50.0													+			+		
215072-010	MET16	10/02/09 07:39	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+		+	+
215072-011	MET14	09/24/09 12:36	1.0												+						
215072-011	MET08	10/01/09 17:24	1.0				+														
215072-011	MET16	10/02/09 05:43	50.0													+			+		
215072-011	MET16	10/02/09 07:49	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+		+	+
QC513410	MET14	09/24/09 12:15	1.0												+						
QC513411	MET14	09/24/09 12:18	1.0												+						
QC513412	MET14	09/24/09 12:21	1.0												+						
QC513413	MET14	09/24/09 12:25	1.0												+						
QC513414	MET14	09/24/09 12:27	1.0												+						
QC513415	MET14	09/24/09 12:29	5.0												+						
QC514509	MET08	10/01/09 16:03	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC514509	MET16	10/02/09 03:16	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
QC514509	MET16	10/02/09 15:57	5.0						+							+					
QC514509	MET26	10/05/09 13:21	5.0																		+
QC514510	MET08	10/01/09 16:08	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC514510	MET16	10/02/09 03:27	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC514510	MET16	10/02/09 16:07	5.0		+			+								+		+			
QC514511	MET08	10/01/09 16:14	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC514511	MET16	10/02/09 03:37	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC514511	MET16	10/02/09 16:18	5.0		+			+								+		+			
QC514512	MET16	10/02/09 04:09	500.0	+						+	+			+	+	+			+		
QC514512	MET16	10/02/09 06:46	5.0		+	+	+	+	+		+	+	+					+	+	+	+
QC514512	MET16	10/02/09 16:56	500.0														+				
QC514513	MET16	10/02/09 04:19	500.0	+							+				+	+			+		
QC514513	MET16	10/02/09 06:57	5.0		+	+	+	+	+	+	+	+	+	+				+	+	+	+
QC514513	MET16	10/02/09 17:06	500.0														+				
QC514514	MET16	10/02/09 03:58	2500											+	+						
QC514514	MET16	10/02/09 06:36	25.0		+	+	+	+	+		+	+	+						+		
QC514514	MET16	10/02/09 16:28	5000																	+	
QC514514	MET16	10/02/09 17:38	250.0	+						+	+					+	+				+
QC514514	MET26	10/05/09 03:36	25.0															+		+	

REPORTING SUMMARY FOR 215072 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALBS	ASBS	BAE	BBE	CD	CA	CR	FE	PB	MG	MN	HG	NI	KS	SE	AG	NA	TL	ZN
QC514515	MET16	10/02/09 05:01	500.0										+	+								
QC514515	MET16	10/02/09 07:07	5.0		+	+	+	+		+		+	+					+	+		+	
QC514515	MET16	10/02/09 17:17	1000																	+		
QC514515	MET16	10/02/09 17:48	50.0	+					+	+					+	+						+

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89395069

Instrument : MET08 Begun : 10/01/09 08:29
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met08_sn_6010	ICALBLK				10/01/09 08:29	1.0		
002	met08_sn_6010	ICAL	CRIM08			10/01/09 08:34	1.0	1	
003	met08_sn_6010	ICAL	CS100			10/01/09 08:40	1.0	2	
004	met08_sn_6010	ICAL	CS1K			10/01/09 08:45	1.0	3	
005	met08_sn_6010	ICAL	CS10K			10/01/09 08:49	1.0	4	
006	met08_sn_6010	ICAL	CS100K			10/01/09 09:06	1.0	5	
007	met08_sn_6010	ICV				10/01/09 09:11	1.0	6	
008	met08_sn_6010	ICB				10/01/09 09:17	1.0		
009	met08_sn_6010	CRI				10/01/09 09:23	1.0	1	
010	met08_sn_6010	ICSA				10/01/09 09:27	1.0	7	10:AL=500000
011	met08_sn_6010	ICSAB				10/01/09 09:40	1.0	8	5:AL=570000
012	met08_sn_6010	BLANK	QC514523	Water	155519	10/01/09 09:46	1.0		
013	met08_sn_6010	BS	QC514524	Water	155519	10/01/09 09:52	1.0		
014	met08_sn_6010	BSD	QC514525	Water	155519	10/01/09 09:56	1.0		
015	met08_sn_6010	MSS	215316-001	Water	155519	10/01/09 10:01	1.0		2:FE=200000
016	met08_sn_6010	MS	QC514526	Water	155519	10/01/09 10:09	1.0		3:FE=240000
017	met08_sn_6010	MSD	QC514527	Water	155519	10/01/09 10:16	1.0		3:FE=230000
018	met08_sn_6010	SER	QC514528	Water	155519	10/01/09 10:23	5.0		
019	met08_sn_6010	PDS	QC514529	Water	155519	10/01/09 10:30	1.0	9 10	1:FE=210000
020	met08_sn_6010	X				10/01/09 10:37	1.0	11	
021	met08_sn_6010	CCV				10/01/09 10:44	1.0	11	
022	met08_sn_6010	CCB				10/01/09 10:51	1.0		
023	met08_sn_6010	SAMPLE	215316-002	Water	155519	10/01/09 10:57	1.0		1:BA=13000
024	met08_sn_6010	X				10/01/09 11:02	1.0	8	5:AL=500000
025	met08_sn_6010	X	RINSE			10/01/09 11:08	1.0		
026	met08_sn_6010	SAMPLE	215316-002	Water	155519	10/01/09 11:13	10.0		
027	met08_sn_6010	SER	QC514528	Water	155519	10/01/09 11:19	50.0		
028	met08_sn_6010	PDS	QC514529	Water	155519	10/01/09 11:23	10.0	12 13	
029	met08_sn_6010	MSS	215316-001	Water	155519	10/01/09 11:29	10.0		
030	met08_sn_6010	ICSAB				10/01/09 11:34	1.0	8	5:AL=480000
031	met08_sn_6010	X	RINSE			10/01/09 11:40	1.0		
032	met08_sn_6010	X				10/01/09 11:46	1.0	11	
033	met08_sn_6010	CCV				10/01/09 11:48	1.0	11	
034	met08_sn_6010	CCB				10/01/09 11:54	1.0		
035	met08_sn_6010	SAMPLE	215244-003	Water	155519	10/01/09 12:01	1.0		
036	met08_sn_6010	SAMPLE	215257-001	Water	155519	10/01/09 12:08	1.0		
037	met08_sn_6010	SAMPLE	215257-002	Water	155519	10/01/09 12:15	1.0		
038	met08_sn_6010	SAMPLE	215257-003	Water	155519	10/01/09 12:20	1.0		
039	met08_sn_6010	SAMPLE	215257-004	Water	155519	10/01/09 12:26	1.0		1:CA=100000
040	met08_sn_6010	SAMPLE	215257-005	Water	155519	10/01/09 12:33	1.0		1:NA=170000
041	met08_sn_6010	SAMPLE	215257-006	Water	155519	10/01/09 12:38	1.0		2:NA=250000
042	met08_sn_6010	SAMPLE	215257-007	Water	155519	10/01/09 12:44	1.0		2:CA=150000
043	met08_sn_6010	SAMPLE	215277-001	Water	155519	10/01/09 12:51	1.0		3:CA=300000
044	met08_sn_6010	SAMPLE	215277-002	Water	155519	10/01/09 12:56	1.0		4:NA=510000
045	met08_sn_6010	CCV				10/01/09 13:02	1.0	11	
046	met08_sn_6010	X				10/01/09 13:09	1.0		
047	met08_sn_6010	CCB				10/01/09 13:13	1.0		
048	met08_sn_6010	SAMPLE	215277-003	Water	155519	10/01/09 13:18	1.0		3:CA=360000
049	met08_sn_6010	SAMPLE	215277-004	Water	155519	10/01/09 13:24	1.0		
050	met08_sn_6010	SAMPLE	215277-005	Water	155519	10/01/09 13:30	1.0		3:CA=360000
051	met08_sn_6010	SAMPLE	215277-007	Water	155519	10/01/09 13:35	1.0		1:NA=180000
052	met08_sn_6010	SAMPLE	215277-008	Water	155519	10/01/09 13:40	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 89395069

Instrument : MET08 Begun : 10/01/09 08:29
Method : EPA 6010B SOP Version : icp metals_rv9

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met08_sn_6010	SAMPLE	215296-002	Water	155519	10/01/09 13:46	1.0		1:NA=580000
054	met08_sn_6010	SAMPLE	215296-004	Water	155519	10/01/09 13:53	1.0		1:NA=640000
055	met08_sn_6010	SAMPLE	215257-001	Water	155519	10/01/09 13:59	1.0		
056	met08_sn_6010	SAMPLE	215257-004	Water	155519	10/01/09 14:05	10.0		
057	met08_sn_6010	SAMPLE	215257-005	Water	155519	10/01/09 14:11	10.0		
058	met08_sn_6010	CCV				10/01/09 14:16	1.0	11	
059	met08_sn_6010	CCB				10/01/09 14:22	1.0		
060	met08_sn_6010	SAMPLE	215257-006	Water	155519	10/01/09 14:28	10.0		
061	met08_sn_6010	SAMPLE	215257-007	Water	155519	10/01/09 14:34	10.0		
062	met08_sn_6010	SAMPLE	215296-002	Water	155519	10/01/09 14:40	10.0		
063	met08_sn_6010	SAMPLE	215296-004	Water	155519	10/01/09 14:45	10.0		
064	met08_sn_6010	CRI				10/01/09 14:51	1.0	1	
065	met08_sn_6010	ICSAB				10/01/09 15:00	1.0	8	5:AL=530000
066	met08_sn_6010	CCV				10/01/09 15:07	1.0	11	
067	met08_sn_6010	X				10/01/09 15:09	1.0	11	
068	met08_sn_6010	CCB				10/01/09 15:16	1.0		
069	met08_sn_6010	BLANK	QC514509	Filtrate	155517	10/01/09 16:03	1.0		
070	met08_sn_6010	BS	QC514510	Filtrate	155517	10/01/09 16:08	1.0		
071	met08_sn_6010	BSD	QC514511	Filtrate	155517	10/01/09 16:14	1.0		
072	met08_sn_6010	MSS	215256-001	Filtrate	155517	10/01/09 16:19	1.0		
073	met08_sn_6010	MS	QC514512	Filtrate	155517	10/01/09 16:27	1.0		
074	met08_sn_6010	MSD	QC514513	Filtrate	155517	10/01/09 16:35	1.0		
075	met08_sn_6010	SER	QC514514	Filtrate	155517	10/01/09 16:42	5.0		
076	met08_sn_6010	PDS	QC514515	Filtrate	155517	10/01/09 16:49	1.0	12 13	
077	met08_sn_6010	CCV				10/01/09 16:56	1.0	11	
078	met08_sn_6010	X				10/01/09 16:58	1.0	11	
079	met08_sn_6010	CCB				10/01/09 17:04	1.0		
080	met08_sn_6010	X				10/01/09 17:07	1.0		
081	met08_sn_6010	SAMPLE	215072-005	Filtrate	155517	10/01/09 17:13	1.0		1:NA=250000
082	met08_sn_6010	SAMPLE	215072-010	Filtrate	155517	10/01/09 17:18	1.0		1:NA=210000
083	met08_sn_6010	SAMPLE	215072-011	Filtrate	155517	10/01/09 17:24	1.0		1:NA=320000
084	met08_sn_6010	X				10/01/09 17:29	1.0	1	
085	met08_sn_6010	X				10/01/09 17:33	1.0	1	
086	met08_sn_6010	ICSAB				10/01/09 17:39	1.0	8	5:AL=530000
087	met08_sn_6010	X				10/01/09 17:45	1.0	11	
088	met08_sn_6010	CCV				10/01/09 17:46	1.0	11	
089	met08_sn_6010	CCB				10/01/09 17:52	1.0		

AH 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 89.

Standards used: 1=S12500 2=S12797 3=S12796 4=S12795 5=S12798 6=S12881 7=S12810 8=S12730 9=S12182 10=S12183 11=S12882 12=S9267 13=S9268

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89395069

Date : 10/01/09 Reference : met08_sn_6010
Sequence : MET08 10/01/09 Analyzed : 10/01/09 08:34

#	Type	Sample ID	Y A
		ICAL STD	1660800
		LOWER LIMIT	498240
		UPPER LIMIT	3321600
008	ICB		1501616
010	ICSA		1438201
011	ICSAB		1509843
012	BLANK	QC514523	1573859
013	BS	QC514524	1486816
014	BSD	QC514525	1518513
015	MSS	215316-001	1569134
016	MS	QC514526	1577433
017	MSD	QC514527	1533449
018	SER	QC514528	1604287
019	PDS	QC514529	1468607
021	CCV		1509453
022	CCB		1571368
023	SAMPLE	215316-002	1609178
026	SAMPLE	215316-002	1590744
027	SER	QC514528	1578596
028	PDS	QC514529	1558495
029	MSS	215316-001	1536919
030	ICSAB		1497387
033	CCV		1554426
034	CCB		1579122
035	SAMPLE	215244-003	1445558
036	SAMPLE	215257-001	1547499
037	SAMPLE	215257-002	1473542
038	SAMPLE	215257-003	1548558
039	SAMPLE	215257-004	1569741
040	SAMPLE	215257-005	1555665
041	SAMPLE	215257-006	1556457
042	SAMPLE	215257-007	1502181
043	SAMPLE	215277-001	1588854
044	SAMPLE	215277-002	1529729
045	CCV		1594382
047	CCB		1546671
048	SAMPLE	215277-003	1464261
049	SAMPLE	215277-004	1539454
050	SAMPLE	215277-005	1554033
051	SAMPLE	215277-007	1571394
052	SAMPLE	215277-008	1524093
055	SAMPLE	215257-001	1555075
056	SAMPLE	215257-004	1568681
057	SAMPLE	215257-005	1575508
058	CCV		1566731
059	CCB		1585142
060	SAMPLE	215257-006	1569838
061	SAMPLE	215257-007	1584335
065	ICSAB		1400279
066	CCV		1567066
068	CCB		1539026

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 89395069

Date : 10/01/09 Reference : met08_sn_6010
Sequence : MET08 10/01/09 Analyzed : 10/01/09 08:34

#	Type	Sample ID	Y A
069	BLANK	QC514509	1721089
070	BS	QC514510	1610796
071	BSD	QC514511	1483872
077	CCV		1571821
079	CCB		1547856
081	SAMPLE	215072-005	1536064
082	SAMPLE	215072-010	1548228
083	SAMPLE	215072-011	1424770
086	ICSAB		1451667
088	CCV		1548189
089	CCB		1549166

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Filtrate: EPA 6010B

Inst : MET08 Reviewer : ---
Calnum : 89395069001 Date : 01-OCT-2009 08:29
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met08_sn_6010	89395069002	CRIM08	01-OCT-2009 08:34	S12500
L2	met08_sn_6010	89395069003	CS100	01-OCT-2009 08:40	S12797
L3	met08_sn_6010	89395069004	CS1K	01-OCT-2009 08:45	S12796
L4	met08_sn_6010	89395069005	CS10K	01-OCT-2009 08:49	S12795
L5	met08_sn_6010	89395069006	CS100K	01-OCT-2009 09:06	S12798

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	25.940	21.284	22.036	21.305		LOR0	0.00000	0.04692		22.641	1.000	0.995	
Arsenic	A	20.480	15.409	15.544	15.046		LOR0	0.00000	0.06644		16.620	1.000	0.995	
Barium	A	246.36	265.02	267.50	252.93		LOR0	0.00000	0.00395		257.95	1.000	0.995	
Boron	A	153.79		163.61	160.46		LOR0	0.00000	0.00623		159.28	1.000	0.995	
Cadmium	A	150.78	156.63	160.08	150.67		LOR0	0.00000	0.00663		154.54	1.000	0.995	
Lead	A	44.233	44.479	44.891	43.051		LOR0	0.00000	0.02322		44.163	1.000	0.995	
Manganese	A	718.98	824.63	843.03	793.69		LOR0	0.00000	0.00126		795.08	1.000	0.995	
Nickel	A	19.100	22.145	22.828	21.968		LOR0	0.00000	0.04550		21.510	1.000	0.995	
Selenium	A	36.690	32.147	31.591	30.821		LOR0	0.00000	0.03244		32.812	1.000	0.995	
Silver	A	319.28	402.59	407.80	395.15		LOR0	0.00000	0.00251		381.21	1.000	0.995	
Thallium	A	18.210	17.621	17.937	17.130		LOR0	0.00000	0.05835		17.725	1.000	0.995	
Zinc	A	59.540	63.431	62.905	60.562		LOR0	0.00000	0.01651		61.610	1.000	0.995	
Aluminum	R	0.3110		0.6669	0.7719	0.6506	LOR0	0.00000	1.53423		0.6001	1.000	0.995	
Calcium	R	7.8875		8.2843	8.6725	7.5645	LOR0	0.00000	0.13200		8.1022	1.000	0.995	
Iron	R	3.2370		3.2334	3.4451	3.1031	LOR0	0.00000	0.32190		3.2547	1.000	0.995	
Magnesium	R	1.0635		1.1944	1.2252	1.0781	LOR0	0.00000	0.92630		1.1403	1.000	0.995	
Potassium	R	4.4320		3.4812	3.9873	3.7827	LOR0	0.00000	0.26422		3.9208	1.000	0.995	
Sodium	R	7.5610		7.4905	8.1319	7.2680	LOR0	0.00000	0.13743		7.6128	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Antimony	A	10.00	**22**	100.0	0	1000	3	10000	0		
Arsenic	A	5.000	**36**	100.0	2	1000	3	10000	0		
Barium	A	5.000	-3	100.0	5	1000	6	10000	0		
Boron	A	100.0	-4			1000	2	10000	0		
Cadmium	A	5.000	0	100.0	4	1000	6	10000	0		
Lead	A	3.000	3	100.0	3	1000	4	10000	0		
Manganese	A	5.000	-9	100.0	4	1000	6	10000	0		
Nickel	A	5.000	-13	100.0	1	1000	4	10000	0		
Selenium	A	10.00	19	100.0	4	1000	2	10000	0		
Silver	A	5.000	-20	100.0	1	1000	3	2000	-1		
Thallium	A	10.00	6	100.0	3	1000	5	10000	0		
Zinc	A	20.00	-2	100.0	5	1000	4	10000	0		
Aluminum	R	100.0	**-52**			1000	2	10000	18	1E+5	0
Calcium	R	200.0	4			1000	9	10000	14	1E+5	0
Iron	R	100.0	4			1000	4	10000	11	1E+5	0
Magnesium	R	200.0	-1			1000	11	10000	13	1E+5	0
Potassium	R	500.0	17			1000	-8	10000	5	1E+5	0
Sodium	R	500.0	4			1000	3	10000	12	1E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08
Calnum : 89395069001 Cal Date : 01-OCT-2009

ICV 89395069007 (01-OCT-2009) stds: S12881

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	5000	5332	ug/L	7	10	
Arsenic	A	5000	5367	ug/L	7	10	
Barium	A	5000	5388	ug/L	8	10	
Boron	A	5000	5322	ug/L	6	10	
Cadmium	A	5000	5356	ug/L	7	10	
Lead	A	5000	5301	ug/L	6	10	
Manganese	A	5000	5244	ug/L	5	10	
Nickel	A	5000	5302	ug/L	6	10	
Selenium	A	5000	5392	ug/L	8	10	
Silver	A	1000	1031	ug/L	3	10	
Thallium	A	5000	5317	ug/L	6	10	
Zinc	A	5000	5242	ug/L	5	10	
Aluminum	R	20000	21090	ug/L	5	10	
Calcium	R	20000	20950	ug/L	5	10	
Iron	R	20000	20700	ug/L	3	10	
Magnesium	R	20000	21000	ug/L	5	10	
Potassium	R	20000	19740	ug/L	-1	10	
Sodium	R	20000	20920	ug/L	5	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069008.1 File : met08_sn_6010 Time : 01-OCT-2009 09:17
Cal : 89395069001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	6.580	ug/L	
Arsenic	A	ND	5.000	2.129	ug/L	
Barium	A	ND	5.000	2.669	ug/L	
Boron	A	ND	100.0	58.99	ug/L	
Cadmium	A	ND	5.000	2.822	ug/L	
Lead	A	ND	3.000	2.054	ug/L	
Manganese	A	ND	5.000	2.000	ug/L	
Nickel	A	ND	5.000	2.062	ug/L	
Selenium	A	ND	10.00	5.003	ug/L	
Silver	A	[3.542]	5.000	2.000	ug/L	!ib
Thallium	A	ND	10.00	5.231	ug/L	
Zinc	A	ND	20.00	12.73	ug/L	
Aluminum	R	ND	100.0	55.89	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	62.05	ug/L	
Magnesium	R	ND	200.0	237.4	ug/L	
Potassium	R	ND	500.0	300.0	ug/L	
Sodium	R	ND	500.0	200.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1501616	-9.58

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069010.1 File : met08_sn_6010 Time : 01-OCT-2009 09:27
Cal : 89395069001 Caldate : 01-OCT-2009
Standards: S12810

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	[6.952]	10.00	ug/L	!a+
Arsenic	A	[-1.406]	5.000	ug/L	
Barium	A	[-0.6566]	5.000	ug/L	
Boron	A	[-164.3]	100.0	ug/L	!a-
Cadmium	A	[-1.859]	5.000	ug/L	
Lead	A	[0.9610]	3.000	ug/L	
Selenium	A	[1.126]	10.00	ug/L	
Silver	A	[3.671]	5.000	ug/L	!a+
Thallium	A	[-9.118]	10.00	ug/L	!a-
Zinc	A	[-3.887]	20.00	ug/L	
Potassium	R	[-112.7]	500.0	ug/L	
Sodium	R	[115.9]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	20080	ug/L	100
Copper	A	20000	20880	ug/L	104
Manganese	A	20000	19500	ug/L	98
Nickel	A	20000	19320	ug/L	97
Vanadium	A	20000	20940	ug/L	105
Aluminum	R	500000	504400	ug/L	101
Calcium	R	500000	487800	ug/L	98
Iron	R	200000	195600	ug/L	98
Magnesium	R	500000	494600	ug/L	99
Titanium	R	20000	20460	ug/L	102

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1438201	-13.40

!=warning +=high bias -=low bias a=ICSA

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069066 File : met08_sn_6010 Time : 01-OCT-2009 15:07
Cal : 89395069001 Caldate : 01-OCT-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	22.641	23.057	5000	5409	ug/L	8	10	
Arsenic	A	16.620	16.332	5000	5426	ug/L	9	10	
Barium	A	257.95	278.81	5000	5509	ug/L	10	10	
Boron	A	159.28	173.65	5000	5410	ug/L	8	10	
Cadmium	A	154.54	165.65	5000	5494	ug/L	10	10	
Lead	A	44.163	46.096	5000	5351	ug/L	7	10	
Manganese	A	795.08	850.42	5000	5354	ug/L	7	10	
Nickel	A	21.510	23.966	5000	5453	ug/L	9	10	
Selenium	A	32.812	33.726	5000	5470	ug/L	9	10	
Silver	A	381.21	418.28	1000	1052	ug/L	5	10	
Thallium	A	17.725	18.440	5000	5380	ug/L	8	10	
Zinc	A	61.610	64.969	5000	5362	ug/L	7	10	
Aluminum	R	0.6001	0.7005	20000	21490	ug/L	7	10	
Calcium	R	8.1022	8.1106	20000	21410	ug/L	7	10	
Iron	R	3.2547	3.2633	20000	21010	ug/L	5	10	
Magnesium	R	1.1403	1.1600	20000	21490	ug/L	7	10	
Potassium	R	3.9208	3.8461	20000	20320	ug/L	2	10	
Sodium	R	7.6128	7.9679	20000	21900	ug/L	10	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1567066	-5.64

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069068 File : met08_sn_6010 Time : 01-OCT-2009 15:16
Cal : 89395069001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	6.580	ug/L	
Arsenic	A	[3.183]	5.000	2.129	ug/L	!ib
Barium	A	ND	5.000	2.669	ug/L	
Boron	A	ND	100.0	58.99	ug/L	
Cadmium	A	ND	5.000	2.822	ug/L	
Lead	A	ND	3.000	2.054	ug/L	
Manganese	A	ND	5.000	2.000	ug/L	
Nickel	A	ND	5.000	2.062	ug/L	
Selenium	A	ND	10.00	5.003	ug/L	
Silver	A	[2.545]	5.000	2.000	ug/L	!ib
Thallium	A	ND	10.00	5.231	ug/L	
Zinc	A	ND	20.00	12.73	ug/L	
Aluminum	R	ND	100.0	55.89	ug/L	
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	62.05	ug/L	
Magnesium	R	ND	200.0	237.4	ug/L	
Potassium	R	ND	500.0	300.0	ug/L	
Sodium	R	ND	500.0	200.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1539026	-7.33

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069077 File : met08_sn_6010 Time : 01-OCT-2009 16:56
Cal : 89395069001 Caldate : 01-OCT-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	22.641	22.884	5000	5369	ug/L	7	10	
Arsenic	A	16.620	16.267	5000	5404	ug/L	8	10	
Barium	A	257.95	279.28	5000	5518	ug/L	10	10	
Boron	A	159.28	174.62	5000	5440	ug/L	9	10	
Cadmium	A	154.54	164.81	5000	5466	ug/L	9	10	
Lead	A	44.163	46.091	5000	5351	ug/L	7	10	
Manganese	A	795.08	856.04	5000	5389	ug/L	8	10	
Nickel	A	21.510	23.991	5000	5458	ug/L	9	10	
Selenium	A	32.812	34.054	5000	5523	ug/L	10	10	
Silver	A	381.21	422.51	1000	1062	ug/L	6	10	
Thallium	A	17.725	18.400	5000	5368	ug/L	7	10	
Zinc	A	61.610	64.979	5000	5363	ug/L	7	10	
Aluminum	R	0.6001	0.7060	20000	21660	ug/L	8	10	
Calcium	R	8.1022	8.1599	20000	21540	ug/L	8	10	
Iron	R	3.2547	3.3268	20000	21420	ug/L	7	10	
Magnesium	R	1.1403	1.1793	20000	21850	ug/L	9	10	
Potassium	R	3.9208	3.8245	20000	20210	ug/L	1	10	
Sodium	R	7.6128	7.9422	20000	21830	ug/L	9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1571821	-5.36

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069079 File : met08_sn_6010 Time : 01-OCT-2009 17:04
Cal : 89395069001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	6.580	ug/L	
Arsenic	A	[3.859]	5.000	2.129	ug/L	!ib
Barium	A	ND	5.000	2.669	ug/L	
Boron	A	ND	100.0	58.99	ug/L	
Cadmium	A	ND	5.000	2.822	ug/L	
Lead	A	ND	3.000	2.054	ug/L	
Manganese	A	ND	5.000	2.000	ug/L	
Nickel	A	ND	5.000	2.062	ug/L	
Selenium	A	ND	10.00	5.003	ug/L	
Silver	A	[4.284]	5.000	2.000	ug/L	!ib
Thallium	A	ND	10.00	5.231	ug/L	
Zinc	A	ND	20.00	12.73	ug/L	
Aluminum	R	[56.83]	100.0	55.89	ug/L	!ib
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	62.05	ug/L	
Magnesium	R	ND	200.0	237.4	ug/L	
Potassium	R	ND	500.0	300.0	ug/L	
Sodium	R	2041	500.0	200.0	ug/L	ib ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1547856	-6.80

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069088 File : met08_sn_6010 Time : 01-OCT-2009 17:46
Cal : 89395069001 Caldate : 01-OCT-2009
Standards: S12882

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	22.641	22.424	5000	5261	ug/L	5	10	
Arsenic	A	16.620	16.160	5000	5368	ug/L	7	10	
Barium	A	257.95	277.52	5000	5483	ug/L	10	10	
Boron	A	159.28	175.70	5000	5474	ug/L	9	10	
Cadmium	A	154.54	164.18	5000	5445	ug/L	9	10	
Lead	A	44.163	45.861	5000	5324	ug/L	6	10	
Manganese	A	795.08	851.25	5000	5359	ug/L	7	10	
Nickel	A	21.510	23.796	5000	5414	ug/L	8	10	
Selenium	A	32.812	33.868	5000	5493	ug/L	10	10	
Silver	A	381.21	418.28	1000	1052	ug/L	5	10	
Thallium	A	17.725	18.326	5000	5346	ug/L	7	10	
Zinc	A	61.610	65.060	5000	5369	ug/L	7	10	
Aluminum	R	0.6001	0.7259	20000	22280	ug/L	**11**	10	c+ ***
Calcium	R	8.1022	8.4798	20000	22390	ug/L	**12**	10	c+ ***
Iron	R	3.2547	3.4394	20000	22140	ug/L	**11**	10	c+ ***
Magnesium	R	1.1403	1.2248	20000	22690	ug/L	**13**	10	c+ ***
Potassium	R	3.9208	3.9796	20000	21030	ug/L	5	10	
Sodium	R	7.6128	8.0416	20000	22100	ug/L	**11**	10	c+ ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1548189	-6.78

+=high bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 89395069089 File : met08_sn_6010 Time : 01-OCT-2009 17:52
Cal : 89395069001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Antimony	A	ND	10.00	6.580	ug/L	
Arsenic	A	[4.228]	5.000	2.129	ug/L	!ib
Barium	A	ND	5.000	2.669	ug/L	
Boron	A	ND	100.0	58.99	ug/L	
Cadmium	A	ND	5.000	2.822	ug/L	
Lead	A	ND	3.000	2.054	ug/L	
Manganese	A	ND	5.000	2.000	ug/L	
Nickel	A	ND	5.000	2.062	ug/L	
Selenium	A	ND	10.00	5.003	ug/L	
Silver	A	[3.275]	5.000	2.000	ug/L	!ib
Thallium	A	ND	10.00	5.231	ug/L	
Zinc	A	ND	20.00	12.73	ug/L	
Aluminum	R	[56.09]	100.0	55.89	ug/L	!ib
Calcium	R	ND	200.0	200.0	ug/L	
Iron	R	ND	100.0	62.05	ug/L	
Magnesium	R	ND	200.0	237.4	ug/L	
Potassium	R	ND	500.0	300.0	ug/L	
Sodium	R	ND	500.0	200.0	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1660800	1549166	-6.72

!=warning ib=instrument blank

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899395234

Instrument : MET16 Begun : 10/01/09 11:14
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09j01l00001	TUN				10/01/09 11:14	1.0	1	
002	09j01l00002	X	RINSE			10/01/09 11:20	1.0	2	
003	09j01l00003	ICALBLK	CALBLANK			10/01/09 11:31	1.0	2	
004	09j01l00004	ICAL				10/01/09 11:41	1.0	3 2	
005	09j01l00005	ICAL				10/01/09 11:52	1.0	4 2	
006	09j01l00006	ICAL				10/01/09 12:02	1.0	5 2	
007	09j01l00007	ICAL				10/01/09 12:13	1.0	6 2	
008	09j01l00008	ICAL				10/01/09 12:23	1.0	7 2	
009	09j01l00009	ICAL				10/01/09 12:34	1.0	8 2	
010	09j01l00010	X				10/01/09 12:44	1.0	9 2	
011	09j01l00011	ICV				10/01/09 12:54	1.0	9 2	
012	09j01l00012	ICB				10/01/09 13:05	1.0	2	
013	09j01l00013	X				10/01/09 13:16	1.0	2	
014	09j01l00014	ICSA				10/01/09 13:23	1.0	10 2	7:CA=350000
015	09j01l00015	ICSAB				10/01/09 13:34	1.0	11 2	11:CA=330000
016	09j01l00016	X	RINSE			10/01/09 13:44	1.0	2	
017	09j01l00017	X	RINSE			10/01/09 13:55	1.0	2	
018	09j01l00018	BLANK	QC514325	Water	155468	10/01/09 14:05	5.0	2	
019	09j01l00019	BS	QC514326	Water	155468	10/01/09 14:16	5.0	2	
020	09j01l00020	BSD	QC514327	Water	155468	10/01/09 14:25	5.0	2	
021	09j01l00021	MSS	215138-013	Water	155468	10/01/09 14:35	5.0	2	1:NA=45000
022	09j01l00022	MS	QC514328	Water	155468	10/01/09 14:46	5.0	2	1:NA=49000
023	09j01l00023	MSD	QC514329	Water	155468	10/01/09 14:56	5.0	2	1:NA=48000
024	09j01l00024	SAMPLE	215138-014	Water	155468	10/01/09 15:06	5.0	2	1:NA=90000
025	09j01l00025	CCV				10/01/09 15:17	1.0	12 2	
026	09j01l00026	CCB				10/01/09 15:28	1.0	2	
027	09j01l00027	X				10/01/09 15:38	1.0	2	
028	09j01l00028	ICSA				10/01/09 15:45	1.0	10 2	7:CA=350000
029	09j01l00029	ICSAB				10/01/09 15:56	1.0	11 2	11:CA=330000
030	09j01l00030	X	RINSE			10/01/09 16:06	1.0	2	
031	09j01l00031	X	RINSE			10/01/09 16:17	1.0	2	
032	09j01l00032	BLANK	QC514072	Water	155410	10/01/09 16:27	5.0	2	
033	09j01l00033	BS	QC514073	Water	155410	10/01/09 16:38	5.0	2	
034	09j01l00034	BSD	QC514074	Water	155410	10/01/09 16:48	5.0	2	
035	09j01l00035	MSS	215210-001	Water	155410	10/01/09 16:59	5.0	2	
036	09j01l00036	MS	QC514075	Water	155410	10/01/09 17:09	5.0	2	1:NA=22000
037	09j01l00037	MSD	QC514076	Water	155410	10/01/09 17:20	5.0	2	1:NA=22000
038	09j01l00038	SAMPLE	215210-002	Water	155410	10/01/09 17:30	5.0	2	1:NA=58000
039	09j01l00039	SAMPLE	215210-003	Water	155410	10/01/09 17:41	5.0	2	1:NA=83000
040	09j01l00040	CCV				10/01/09 17:51	1.0	12 2	
041	09j01l00041	CCB				10/01/09 18:01	1.0	2	
042	09j01l00042	X				10/01/09 18:12	1.0	2	
043	09j01l00043	BLANK	QC514072	Water	155410	10/01/09 18:23	5.0	2	
044	09j01l00044	SAMPLE	215210-004	Water	155410	10/01/09 18:33	5.0	2	1:NA=37000
045	09j01l00045	SAMPLE	215210-005	Water	155410	10/01/09 18:44	5.0	2	1:NA=39000
046	09j01l00046	SAMPLE	215210-006	Water	155410	10/01/09 18:54	5.0	2	1:NA=34000
047	09j01l00047	SAMPLE	215210-007	Water	155410	10/01/09 19:05	5.0	2	1:NA=34000
048	09j01l00048	SAMPLE	215210-008	Water	155410	10/01/09 19:15	5.0	2	
049	09j01l00049	SAMPLE	215210-010	Water	155410	10/01/09 19:26	5.0	2	1:NA=30000
050	09j01l00050	SAMPLE	215210-011	Water	155410	10/01/09 19:36	50.0	2	1:NA=150000
051	09j01l00051	SAMPLE	215210-012	Water	155410	10/01/09 19:47	5.0	2	1:NA=29000
052	09j01l00052	SAMPLE	215210-013	Water	155410	10/01/09 19:57	5.0	2	1:NA=32000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899395234

Instrument : MET16 Begun : 10/01/09 11:14
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09j01l00053	CCV				10/01/09 20:08	1.0	12 2	
054	09j01l00054	CCB				10/01/09 20:18	1.0	2	
055	09j01l00055	X				10/01/09 20:29	1.0	2	
056	09j01l00056	SAMPLE	215210-014	Water	155410	10/01/09 20:39	5.0	2	
057	09j01l00057	SAMPLE	215210-015	Water	155410	10/01/09 20:50	5.0	2	1:NA=25000
058	09j01l00058	SAMPLE	215210-016	Water	155410	10/01/09 21:00	5.0	2	
059	09j01l00059	SAMPLE	215210-017	Water	155410	10/01/09 21:11	5.0	2	
060	09j01l00060	SAMPLE	215210-018	Water	155410	10/01/09 21:22	5.0	2	1:NA=26000
061	09j01l00061	SAMPLE	215210-019	Water	155410	10/01/09 21:32	5.0	2	1:NA=34000
062	09j01l00062	SAMPLE	215210-020	Water	155410	10/01/09 21:43	5.0	2	1:NA=53000
063	09j01l00063	TUN				10/01/09 21:54	1.0	1	
064	09j01l00064	X	RINSE			10/01/09 22:00	1.0	2	
065	09j01l00065	SAMPLE	215605-001	Water	155410	10/01/09 22:10	5.0	2	1:NA=37000
066	09j01l00066	CCV				10/01/09 22:21	1.0	12 2	
067	09j01l00067	CCB				10/01/09 22:31	1.0	2	
068	09j01l00068	X				10/01/09 22:42	1.0	2	
069	09j01l00069	MSS	215166-001	Water	155362	10/01/09 22:52	50.0	2	
070	09j01l00070	SAMPLE	215166-002	Water	155362	10/01/09 23:03	50.0	2	
071	09j01l00071	SAMPLE	215166-003	Water	155362	10/01/09 23:13	50.0	2	
072	09j01l00072	SAMPLE	215166-004	Water	155362	10/01/09 23:24	50.0	2	
073	09j01l00073	SAMPLE	215166-005	Water	155362	10/01/09 23:35	50.0	2	
074	09j01l00074	SAMPLE	215166-006	Water	155362	10/01/09 23:45	50.0	2	
075	09j01l00075	SAMPLE	215166-007	Water	155362	10/01/09 23:56	50.0	2	
076	09j01l00076	SAMPLE	215166-008	Water	155362	10/02/09 00:06	50.0	2	
077	09j01l00077	SAMPLE	215166-009	Water	155362	10/02/09 00:17	50.0	2	
078	09j01l00078	SAMPLE	215166-011	Water	155362	10/02/09 00:27	100.0	2	
079	09j01l00079	CCV				10/02/09 00:38	1.0	12 2	
080	09j01l00080	CCB				10/02/09 00:48	1.0	2	
081	09j01l00081	X				10/02/09 00:59	1.0	2	
082	09j01l00082	SAMPLE	215166-012	Water	155362	10/02/09 01:10	50.0	2	
083	09j01l00083	SAMPLE	215166-013	Water	155362	10/02/09 01:20	50.0	2	
084	09j01l00084	SAMPLE	215166-014	Water	155362	10/02/09 01:31	50.0	2	
085	09j01l00085	SAMPLE	215166-015	Water	155362	10/02/09 01:41	50.0	2	
086	09j01l00086	CCV				10/02/09 01:52	1.0	12 2	
087	09j01l00087	CCB				10/02/09 02:02	1.0	2	
088	09j01l00088	X				10/02/09 02:13	1.0	2	
089	09j01l00089	ICSA				10/02/09 02:23	1.0	10 2	7:CA=350000
090	09j01l00090	X				10/02/09 02:34	1.0	11 2	13:CA=330000
091	09j01l00091	ICSAB				10/02/09 02:45	1.0	11 2	10:CA=330000
092	09j01l00092	X	RINSE			10/02/09 02:55	1.0	2	
093	09j01l00093	X	RINSE			10/02/09 03:06	1.0	2	
094	09j01l00094	BLANK	QC514509	Filtrate	155517	10/02/09 03:16	5.0	2	
095	09j01l00095	BS	QC514510	Filtrate	155517	10/02/09 03:27	5.0	2	
096	09j01l00096	BSD	QC514511	Filtrate	155517	10/02/09 03:37	5.0	2	
097	09j01l00097	MSS	215256-001	Filtrate	155517	10/02/09 03:48	500.0	2	
098	09j01l00098	SER	QC514514	Filtrate	155517	10/02/09 03:58	2500	2	
099	09j01l00099	MS	QC514512	Filtrate	155517	10/02/09 04:09	500.0	2	
100	09j01l00100	MSD	QC514513	Filtrate	155517	10/02/09 04:19	500.0	2	
101	09j01l00101	CCV				10/02/09 04:30	1.0	12 2	
102	09j01l00102	CCB				10/02/09 04:40	1.0	2	
103	09j01l00103	X				10/02/09 04:51	1.0	2	
104	09j01l00104	PDS	QC514515	Filtrate	155517	10/02/09 05:01	500.0	13 14 2	1:NA=22000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899395234

Instrument : MET16 Begun : 10/01/09 11:14
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09j01l00105	SAMPLE	215256-002	Filtrate	155517	10/02/09 05:12	500.0	2	
106	09j01l00106	SAMPLE	215072-005	Filtrate	155517	10/02/09 05:22	50.0	2	
107	09j01l00107	SAMPLE	215072-010	Filtrate	155517	10/02/09 05:33	50.0	2	
108	09j01l00108	SAMPLE	215072-011	Filtrate	155517	10/02/09 05:43	50.0	2	
109	09j01l00109	CCV				10/02/09 05:54	1.0	12 2	
110	09j01l00110	CCB				10/02/09 06:04	1.0	2	
111	09j01l00111	X				10/02/09 06:15	1.0	2	
112	09j01l00112	MSS	215256-001	Filtrate	155517	10/02/09 06:26	5.0	2	7:NA=1100000
113	09j01l00113	SER	QC514514	Filtrate	155517	10/02/09 06:36	25.0	2	
114	09j01l00114	MS	QC514512	Filtrate	155517	10/02/09 06:46	5.0	2	7:NA=1000000
115	09j01l00115	MSD	QC514513	Filtrate	155517	10/02/09 06:57	5.0	2	7:NA=1000000
116	09j01l00116	PDS	QC514515	Filtrate	155517	10/02/09 07:07	5.0	13 14 2	2:NA=1000000
117	09j01l00117	SAMPLE	215256-002	Filtrate	155517	10/02/09 07:18	5.0	2	5:NA=550000
118	09j01l00118	SAMPLE	215072-005	Filtrate	155517	10/02/09 07:28	5.0	2	1:NA=40000
119	09j01l00119	SAMPLE	215072-010	Filtrate	155517	10/02/09 07:39	5.0	2	1:NA=35000
120	09j01l00120	SAMPLE	215072-011	Filtrate	155517	10/02/09 07:49	5.0	2	1:NA=56000
121	09j01l00121	CCV				10/02/09 08:00	1.0	12 2	
122	09j01l00122	CCB				10/02/09 08:10	1.0	2	
123	09j01l00123	X				10/02/09 08:21	1.0	2	
124	09j01l00124	TUN				10/02/09 08:32	1.0	1	
125	09j01l00125	X	RINSE			10/02/09 08:38	1.0	2	
126	09j01l00126	BLANK	QC514502	Filtrate	155516	10/02/09 08:49	5.0	2	
127	09j01l00127	BS	QC514503	Filtrate	155516	10/02/09 08:59	5.0	2	
128	09j01l00128	BSD	QC514504	Filtrate	155516	10/02/09 09:10	5.0	2	
129	09j01l00129	MSS	215297-003	Filtrate	155516	10/02/09 09:20	5.0	2	1:NA=91000
130	09j01l00130	SER	QC514507	Filtrate	155516	10/02/09 09:31	25.0	2	
131	09j01l00131	MS	QC514505	Filtrate	155516	10/02/09 09:41	5.0	2	
132	09j01l00132	MSD	QC514506	Filtrate	155516	10/02/09 09:52	5.0	2	
133	09j01l00133	PDS	QC514508	Filtrate	155516	10/02/09 10:02	5.0	2 13 14	1:NA=95000
134	09j01l00134	SAMPLE	215297-002	Filtrate	155516	10/02/09 10:13	5.0	2	1:NA=81000
135	09j01l00135	SAMPLE	215297-004	Filtrate	155516	10/02/09 10:23	5.0	2	1:NA=99000
136	09j01l00136	CCV				10/02/09 10:34	1.0	12 2	
137	09j01l00137	CCB				10/02/09 10:44	1.0	2	
138	09j01l00138	ICSA				10/02/09 10:55	1.0	10 2	7:CA=350000
139	09j01l00139	ICSAB				10/02/09 11:05	1.0	11 2	11:CA=330000
140	09j01l00140	X	RINSE			10/02/09 11:16	1.0	2	

JYF 10/02/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 139.

Standards used: 1=S13057 2=S12847 3=S13065 4=S13066 5=S13067 6=S13068 7=S13063 8=S13064 9=S13061 10=S13059 11=S13060 12=S13062 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899395234

Date : 10/01/09 Reference : 09j01l00003
Sequence : MET16 09j01l00 Analyzed : 10/01/09 11:31

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2028747	1313225	47570	295847	65565	24255	1797934	2094425	1691104	2896827
		LOWER LIMIT	608624	393968	14271	88754	19670	7277	539380	628328	507331	869048
		UPPER LIMIT	2434496	1575870	57084	355016	78678	29106	2157521	2513310	2029325	3476192
012	ICB		2168478	1381203	51553	337397	74469	26354	1831113	2120627	1744853	2945284
014	ICSA		1735571	1207790	50456	288824	58277	24000	1514150	1682820	1551339	2679462
015	ICSAB		1671651	1184846	47633	274125	57519	23247	1531833	1703114	1566654	2715368
018	BLANK	QC514325	1909480	1265653	46680	269246	60916	24057	1755789	2082392	1673079	2859343
019	BS	QC514326	1940714	1281182	47013	273663	61913	23878	1756534	2075535	1687031	2884790
020	BSD	QC514327	1997926	1315647	48071	275388	62262	24720	1782121	2090884	1701248	2901843
021	MSS	215138-013	2058265	1402603	49601	304839	69572	25243	1834482	2047495	1768688	3001094
022	MS	QC514328	1979136	1325835	48695	310980	69467	24865	1734278	1970630	1694388	2880019
023	MSD	QC514329	1984879	1331901	49521	315373	70185	24959	1744005	1984266	1695526	2886718
024	SAMPLE	215138-014	2001200	1329177	49692	310039	69458	24925	1751591	1956474	1708688	2857567
025	CCV		1970976	1308783	49078	293689	66529	24832	1740548	2022641	1695773	2901322
026	CCB		1982697	1283224	47712	307062	69381	24462	1756046	2079275	1664076	2839299
028	ICSA		1700179	1191978	49833	312338	64338	23826	1522653	1687538	1556978	2693116
029	ICSAB		1623235	1167382	46509	303516	64315	22703	1524293	1694280	1564898	2688248
032	BLANK	QC514072	1722901	1158945	42958	271928	65463	23360	1670015	2042448	1582375	2780459
033	BS	QC514073	1744368	1179131	42952	275325	65262	23143	1671374	2010045	1592463	2805415
034	BSD	QC514074	1759130	1178461	42667	270907	64094	23034	1664784	2021781	1588896	2813538
035	MSS	215210-001	1697516	1147491	41563	269489	64704	22763	1605779	1967074	1522337	2737915
036	MS	QC514075	1730293	1176904	42915	272705	64911	23271	1623973	1942996	1556941	2771900
037	MSD	QC514076	1749729	1186761	43198	272310	64619	23374	1617451	1941639	1568134	2770406
038	SAMPLE	215210-002	1779134	1189232	44027	270685	63932	23659	1642367	1914363	1571059	2749685
039	SAMPLE	215210-003	1796138	1198032	44392	266645	62885	23579	1633303	1905908	1584085	2753398
040	CCV		1934868	1269581	46846	284652	63914	23782	1691155	1955035	1654240	2809166
041	CCB		1960980	1252390	46390	286675	65659	23909	1730885	2049556	1649112	2799734
043	BLANK	QC514072	1855662	1181325	44604	262775	61943	23625	1692462	2034729	1580356	2780102
044	SAMPLE	215210-004	1811091	1180267	44133	257419	61196	23649	1612043	1916102	1545771	2732073
045	SAMPLE	215210-005	1796824	1175209	44131	256408	61036	23616	1619035	1912606	1550069	2733169
046	SAMPLE	215210-006	1813991	1214320	42978	250993	59950	22427	1665169	1972403	1579296	2800592
047	SAMPLE	215210-007	1780386	1151212	42130	258644	61352	22756	1585617	1910600	1525076	2708520
048	SAMPLE	215210-008	1887519	1193136	45360	252213	59768	24293	1677710	2038529	1590954	2801061
049	SAMPLE	215210-010	1831340	1178903	44551	250349	58971	23806	1636910	1950758	1545853	2753510
050	SAMPLE	215210-011	1950667	1268471	49485	266233	59324	24543	1677290	1852825	1645457	2775452
051	SAMPLE	215210-012	1829095	1168832	45037	244555	58103	23986	1638194	1946553	1542416	2761021
052	SAMPLE	215210-013	1824256	1171851	44395	241281	57044	23902	1628900	1937499	1543316	2751616
053	CCV		2020068	1299388	49434	260410	57957	24948	1725173	1978738	1663773	2828196
054	CCB		1989229	1231743	48943	256014	58568	25046	1707162	1992382	1622205	2744393
056	SAMPLE	215210-014	1826522	1176873	44688	232699	54711	23568	1620131	1944388	1527797	2743700
057	SAMPLE	215210-015	1824981	1161203	44810	230807	53760	23589	1612861	1921267	1522779	2716985
058	SAMPLE	215210-016	1830221	1177410	45050	223933	52751	24007	1623416	1964478	1532629	2739619
059	SAMPLE	215210-017	1846015	1171522	44857	219712	52125	23849	1625089	1934937	1540175	2727820
060	SAMPLE	215210-018	1846134	1171957	44866	216092	50636	23797	1608530	1929856	1531071	2722864
061	SAMPLE	215210-019	1855285	1172797	44860	213312	49957	23564	1613997	1913009	1527421	2716082
062	SAMPLE	215210-020	1846824	1173732	45291	209257	48658	23775	1623256	1901715	1535939	2718342
065	SAMPLE	215605-001	1838016	1154383	44826	208384	48169	23508	1593683	1885036	1505952	2678624
066	CCV		2060249	1302510	50089	226503	49601	24673	1699866	1952643	1670768	2804077
067	CCB		2086122	1280452	49829	222735	50344	25210	1739185	2022318	1673518	2804179
069	MSS	215166-001	2063521	1265500	48861	220955	50232	24885	1726647	2004361	1639809	2763094
070	SAMPLE	215166-002	2039855	1248970	47898	218597	49714	24649	1709113	2004620	1630372	2779451

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899395234

Date : 10/01/09 Reference : 09j01l00003
Sequence : MET16 09j01l00 Analyzed : 10/01/09 11:31

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
071	SAMPLE	215166-003	2076017	1281205	48291	216551	49356	24778	1724583	2007879	1650840	2794987
072	SAMPLE	215166-004	2094456	1277869	49270	217299	49584	25265	1731791	2011768	1652268	2808174
073	SAMPLE	215166-005	2111633	1279163	49205	217940	49756	25056	1734488	2000820	1644416	2810341
074	SAMPLE	215166-006	2099453	1282634	50303	215938	49045	25306	1746489	2013704	1654827	2803827
075	SAMPLE	215166-007	2099121	1284186	48882	214396	49055	25392	1741620	2024675	1660570	2799983
076	SAMPLE	215166-008	2113158	1281170	49622	212901	48578	25612	1750042	2020399	1665280	2832344
077	SAMPLE	215166-009	2116699	1297362	50036	215525	48907	25842	1766299	2035500	1688905	2838855
078	SAMPLE	215166-011	2099429	1287340	50578	222044	49520	25689	1742341	2031139	1675832	2820379
079	CCV		2218743	1400099	54707	216460	47598	27021	1789818	1997723	1777120	2908119
080	CCB		2197606	1343782	53389	219230	49329	26842	1808177	2062678	1750496	2898303
082	SAMPLE	215166-012	2121639	1307815	50799	211932	48262	25933	1780829	2043992	1699037	2851785
083	SAMPLE	215166-013	2138612	1337140	50857	213688	48506	26201	1807990	2082931	1736055	2887761
084	SAMPLE	215166-014	2122349	1305433	51122	210661	47921	25862	1768706	2032044	1676001	2850780
085	SAMPLE	215166-015	2118530	1312047	51194	210341	47850	26052	1775043	2034039	1694662	2840143
086	CCV		2260963	1425872	55603	210447	46192	27238	1815175	2015051	1796029	2931081
087	CCB		2241597	1371000	53788	209092	46773	27254	1838490	2080261	1774529	2915531
089	ICSA		1795817	1228907	52268	207931	42353	24913	1541152	1664179	1600460	2678387
091	ICSAB		1633776	1157783	48532	203137	43216	23691	1519097	1664012	1570408	2657439
094	BLANK	QC514509	1828832	1249540	47098	195288	46092	24504	1778585	2036590	1706908	2861572
095	BS	QC514510	1840762	1248122	45986	195556	45606	24295	1765435	2015630	1684058	2857062
096	BSD	QC514511	1901388	1271897	47925	197953	46010	24782	1777156	2034448	1699838	2873286
097	MSS	215256-001	1939419	1297111	47670	202368	47128	25335	1813455	2063626	1772635	2887313
098	SER	QC514514	1916717	1289972	49276	203597	47530	25570	1806584	2065324	1739998	2864772
099	MS	QC514512	1949519	1314602	49839	207168	48470	25964	1837941	2067663	1786335	2924593
100	MSD	QC514513	1962073	1326847	49811	204117	47793	25743	1839599	2081449	1796721	2924723
101	CCV		1982845	1346503	50833	212595	48439	25739	1809804	2034092	1776046	2958918
102	CCB		2014620	1329184	50760	211843	49102	26128	1862692	2094897	1768337	2919581
104	PDS	QC514515	1999629	1375235	52174	194495	45236	26708	1808244	2023675	1820802	2950268
105	SAMPLE	215256-002	1998895	1327212	50995	207313	49096	26492	1843091	2088984	1767296	2931627
106	SAMPLE	215072-005	1997335	1320512	50279	208989	48753	26403	1831919	2070715	1761973	2914059
107	SAMPLE	215072-010	1988425	1314491	50163	207801	48612	26352	1835751	2097935	1747999	2915174
108	SAMPLE	215072-011	2003750	1317019	50923	209163	48974	26535	1833650	2090745	1750791	2918682
109	CCV		2078620	1387360	53784	214340	48954	27344	1842109	2036565	1816248	2980670
110	CCB		2051175	1362208	52359	213173	49401	26877	1875097	2113007	1803222	2968585
112	MSS	215256-001	1897419	1653055 *	68094 *	263520	44227	26198	1597677	1595810	4196066 *	2749980
113	SER	QC514514	1861190	1343373	53361	205645	44719	25440	1755389	1903971	2287708 *	2914726
114	MS	QC514512	1759552	1579179 *	63014 *	241435	42221	24772	1585150	1597879	4036892 *	2723337
115	MSD	QC514513	1718609	1571136	62307 *	230800	40258	24339	1589912	1591895	4059041 *	2709730
116	PDS	QC514515	1699631	1602656 *	62711 *	224221	38905	24253	1587444	1589071	4163545 *	2719213
117	SAMPLE	215256-002	1822128	1348462	52581	185628	40283	24677	1722977	1735713	1784302	2760650
118	SAMPLE	215072-005	1853662	1331779	51173	178389	42321	26559	1888289	2045730	1839518	3005889
119	SAMPLE	215072-010	1791292	1281091	49585	176469	42329	25838	1831785	2020747	1768718	2918321
120	SAMPLE	215072-011	1805762	1294886	48694	175884	41869	25283	1820293	1983351	1760690	2915511
121	CCV		1898924	1343672	51695	183264	42708	26354	1865971	2018803	1834562	2974950
122	CCB		1897394	1324374	50139	179710	42482	25814	1873326	2069604	1797431	2944029
126	BLANK	QC514502	1733092	1236753	46112	163941	39174	24242	1790500	2030601	1715066	2874943
127	BS	QC514503	1767259	1244917	46623	163215	38695	24467	1794033	2022707	1719731	2864190
128	BSD	QC514504	1785173	1267388	47835	164728	39034	25029	1828171	2034477	1752589	2901955
129	MSS	215297-003	1652882	1192577	44149	160696	38221	23396	1693840	1865274	1643783	2775055
130	SER	QC514507	1726496	1220531	45915	169918	40385	24414	1756863	1986224	1697538	2823512
131	MS	QC514505	1688685	1214924	45378	164027	38386	23570	1696973	1877879	1678474	2820961
132	MSD	QC514506	1696202	1229620	45912	166340	39149	23828	1711681	1886279	1685077	2816452

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899395234

Date : 10/01/09 Reference : 09j01l00003
Sequence : MET16 09j01l00 Analyzed : 10/01/09 11:31

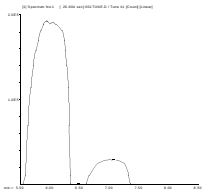
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
133	PDS	QC514508	1666428	1214067	45619	164994	38334	23557	1673542	1836016	1647493	2771037
134	SAMPLE	215297-002	1674997	1210533	44650	162678	38398	23684	1717361	1885507	1669961	2791859
135	SAMPLE	215297-004	1670857	1194077	44319	160523	38271	23196	1705761	1861647	1644609	2748818
136	CCV		1819991	1290206	48222	171466	39667	24807	1757029	1937217	1738831	2845883
137	CCB		1791918	1252300	46288	161352	38334	24197	1789525	2000621	1721622	2801899
138	ICSA		1585291	1166269	46430	165739	35316	22831	1515410	1601892	1571831	2585707
139	ICSAB		1534328	1165976	45586	172362	37042	22510	1522115	1592553	1583878	2600688

MET16 QC Tune Report

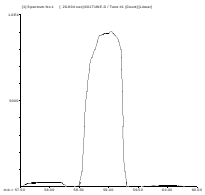
Data File: C:\ICPCHEM\1\DATA\09J01l00.B\001TUNE.D
Date Acquired: Oct 1 2009 11:14 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

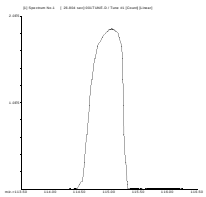
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	169453	170048	171495	171782	0.73	5.00	
59 Co	52300	52922	53572	53173	2.00	5.00	
115 In	1022240	1023133	1041095	1038072	0.83	5.00	
205 Tl	88573	90248	90442	90632	0.69	5.00	



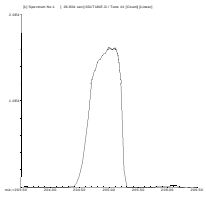
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



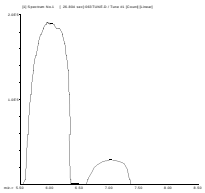
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

MET16 QC Tune Report

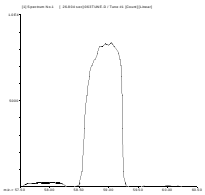
Data File: C:\ICPCHEM\1\DATA\09J01l00.B\063TUNE.D
Date Acquired: Oct 1 2009 09:54 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

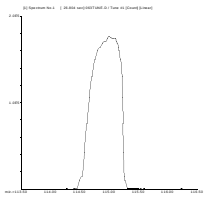
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	161075	167203	170110	171919	2.69	5.00	
59 Co	47279	48552	49076	49499	2.17	5.00	
115 In	966036	976413	985690	985533	0.60	5.00	
205 Tl	87589	86124	85201	85239	1.20	5.00	



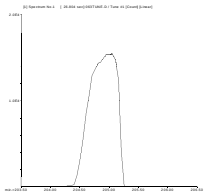
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



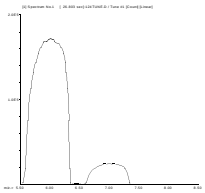
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET16 QC Tune Report

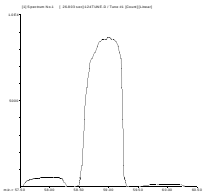
Data File: C:\ICPCHEM\1\DATA\09J01l00.B\124TUNE.D
Date Acquired: Oct 2 2009 08:32 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

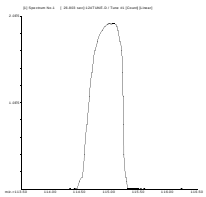
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	146260	150849	152502	153471	2.19	5.00	
59 Co	50408	51860	51687	51645	1.07	5.00	
115 In	1067726	1066138	1066741	1056346	0.54	5.00	
205 Tl	89507	88317	86698	86521	2.27	5.00	



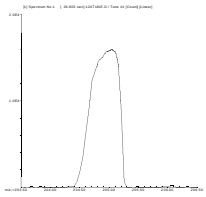
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Filtrate: EPA 6020

Inst : MET16 Reviewer : ---
Calnum : 899395234001 Date : 01-OCT-2009 11:31
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09j01l00004	899395234004		01-OCT-2009 11:41	S13065, S12847
L2	09j01l00005	899395234005		01-OCT-2009 11:52	S13066, S12847
L3	09j01l00006	899395234006		01-OCT-2009 12:02	S13067, S12847
L4	09j01l00007	899395234007		01-OCT-2009 12:13	S13068, S12847
L5	09j01l00008	899395234008		01-OCT-2009 12:23	S13063, S12847
L6	09j01l00009	899395234009		01-OCT-2009 12:34	S13064, S12847

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0097	0.0074	0.0068	0.0065	0.0064	0.0064	BLNK	-0.6922	156.302		0.0072	1.000	0.995	
Antimony	A	0.0065	0.0026	0.0025	0.0025	0.0025	0.0025	BLNK	-0.0127	397.019		0.0032	1.000	0.995	
Barium	A	0.0011	6.4E-4	5.7E-4	5.6E-4	5.6E-4	5.6E-4	BLNK	-0.0179	1799.52		6.6E-4	1.000	0.995	
Beryllium	A	0.0025	0.0020	0.0021	0.0020	0.0020	0.0019	BLNK	-0.0063	520.661		0.0021	0.999	0.995	
Cadmium	A	8.0E-4	7.0E-4	6.8E-4	6.7E-4	6.8E-4	6.7E-4	BLNK	-0.0111	1495.10		7.0E-4	1.000	0.995	
Calcium	A	9.7E-4	2.8E-4	2.2E-4	1.8E-4	1.8E-4	1.8E-4	BLNK	-17.933	5644.77		3.4E-4	1.000	0.995	
Lead	A	0.0128	0.0075	0.0070	0.0066	0.0063	0.0063	BLNK	-0.0619	158.550		0.0077	1.000	0.995	
Magnesium	A	0.0096	0.0067	0.0062	0.0059	0.0057	0.0057	BLNK	-1.8314	175.090		0.0066	1.000	0.995	
Potassium	A	0.1025	0.0248	0.0156	0.0067	0.0058	0.0058	BLNK	-163.94	173.849		0.0269	1.000	0.995	
Silver	A	0.0042	0.0029	0.0029	0.0028	0.0028	0.0029	BLNK	-0.0073	347.872		0.0031	1.000	0.995	
Thallium	A	0.0097	0.0067	0.0066	0.0064	0.0065	0.0068	BLNK	-0.0212	148.444		0.0071	1.000	0.995	
Arsenic	E	0.0078	0.0047	0.0048	0.0046	0.0045	0.0045	BLNK	-0.0490	222.146		0.0052	1.000	0.995	
Chromium	E	0.0816	0.0340	0.0297	0.0262	0.0257	0.0251	BLNK	-0.1067	39.7131		0.0370	1.000	0.995	
Manganese	E	0.0285	0.0154	0.0140	0.0131	0.0129	0.0126	BLNK	-0.0263	78.7906		0.0161	1.000	0.995	
Nickel	E	0.0245	0.0132	0.0118	0.0111	0.0107	0.0104	BLNK	-0.0537	95.7864		0.0136	1.000	0.995	
Sodium	E	0.0684	0.0191	0.0133	0.0078	0.0066	0.0065	BLNK	-90.700	154.065		0.0203	1.000	0.995	
Zinc	E	0.1794	0.0383	0.0220	0.0102	0.0089	0.0086	BLNK	-0.1710	115.512		0.0446	0.999	0.995	
Iron	H	0.0131	0.0083	0.0080	0.0077	0.0074	0.0072	BLNK	-1.4624	137.696		0.0086	1.000	0.995	
Selenium	H	0.0018	0.0012	0.0012	0.0012	0.0012	0.0011	BLNK	-0.0238	879.889		0.0013	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	**45**	50.00	14	100.0	6	1000	2	10000	-1	20000	0
Antimony	A	0.100	**145**	0.500	0	1.000	-3	10.00	-2	100.0	0	200.0	0
Barium	A	0.100	**75**	0.500	11	1.000	1	10.00	0	100.0	0	200.0	0
Beryllium	A	0.100	**24**	0.500	1	1.000	6	10.00	5	100.0	4	200.0	-1
Cadmium	A	0.100	9	0.500	3	1.000	0	10.00	0	100.0	2	200.0	-1
Calcium	A	10.00	**269**	50.00	**22**	100.0	8	1000	1	10000	1	20000	0
Lead	A	0.100	**41**	0.500	7	1.000	4	10.00	4	100.0	0	200.0	0
Magnesium	A	10.00	**50**	50.00	13	100.0	8	1000	3	10000	0	20000	0
Potassium	A	10.00	**43**	50.00	3	100.0	7	1000	1	10000	-1	20000	0
Silver	A	0.100	**38**	0.500	0	1.000	0	10.00	-3	100.0	-2	200.0	0
Thallium	A	0.050	2	0.250	-9	0.500	-7	5.000	-5	50.00	-3	100.0	1
Arsenic	E	0.100	**24**	0.500	-4	1.000	2	10.00	1	100.0	0	200.0	0
Chromium	E	0.100	**117**	0.500	14	1.000	7	10.00	3	100.0	2	200.0	0
Manganese	E	0.100	**98**	0.500	16	1.000	8	10.00	3	100.0	2	200.0	0
Nickel	E	0.100	**81**	0.500	15	1.000	7	10.00	6	100.0	3	200.0	-1
Sodium	E	10.00	**47**	50.00	14	100.0	14	1000	11	10000	2	20000	0
Zinc	E	0.100	**1801**	0.500	**308**	1.000	**138**	10.00	16	100.0	3	200.0	-1
Iron	H	10.00	**66**	50.00	11	100.0	8	1000	5	10000	3	20000	-1
Selenium	H	0.100	**34**	0.500	3	1.000	7	10.00	6	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16
Calnum : 899395234001 Cal Date : 01-OCT-2009

ICV 899395234011 (09j01l00011 01-OCT-2009) stds: S13061, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10480	ug/L	5	10	
Antimony	A	100.0	102.1	ug/L	2	10	
Barium	A	100.0	101.9	ug/L	2	10	
Beryllium	A	100.0	109.4	ug/L	9	10	
Cadmium	A	100.0	102.5	ug/L	3	10	
Calcium	A	10000	10360	ug/L	4	10	
Lead	A	100.0	101.4	ug/L	1	10	
Magnesium	A	10000	10350	ug/L	4	10	
Potassium	A	10000	10400	ug/L	4	10	
Silver	A	100.0	101.3	ug/L	1	10	
Thallium	A	50.00	49.90	ug/L	0	10	
Arsenic	E	100.0	105.9	ug/L	6	10	
Chromium	E	100.0	104.1	ug/L	4	10	
Manganese	E	100.0	101.7	ug/L	2	10	
Nickel	E	100.0	104.0	ug/L	4	10	
Sodium	E	10000	10350	ug/L	4	10	
Zinc	E	100.0	105.0	ug/L	5	10	
Iron	H	10000	10320	ug/L	3	10	
Selenium	H	100.0	103.3	ug/L	3	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234012 File : 09j01l00012 Time : 01-OCT-2009 13:05
Cal : 899395234001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	[7.490]	10.00	6.200	ug/L	!ib
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01670]	0.05000	0.01280	ug/L	!ib
Arsenic	E	[0.04100]	0.1000	0.03563	ug/L	!ib
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	2168478	6.89
Scandium	A	1313225	1381203	5.18
Scandium	E	47570	51553	8.37
Scandium	H	295847	337397	14.04
Germanium	H	65565	74469	13.58
Germanium	E	24255	26354	8.65
Indium	A	1797934	1831113	1.85
Bismuth	A	2094425	2120627	1.25
Yttrium	A	1691104	1744853	3.18
Terbium	A	2896827	2945284	1.67

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234086 File : 09j01l00086 Time : 02-OCT-2009 01:52
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13062, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0072	0.0066	10000	10250	ug/L	3	10	
Antimony	A	0.0032	0.0025	100.0	100.7	ug/L	1	10	
Barium	A	6.6E-4	5.7E-4	100.0	103.2	ug/L	3	10	
Beryllium	A	0.0021	0.0020	100.0	106.3	ug/L	6	10	
Cadmium	A	7.0E-4	6.8E-4	100.0	101.3	ug/L	1	10	
Calcium	A	3.4E-4	1.8E-4	10000	10110	ug/L	1	10	
Lead	A	0.0077	0.0062	100.0	98.43	ug/L	-2	10	
Magnesium	A	0.0066	0.0058	10000	10120	ug/L	1	10	
Potassium	A	0.0269	0.0060	10000	10290	ug/L	3	10	
Silver	A	0.0031	0.0029	100.0	100.8	ug/L	1	10	
Thallium	A	0.0071	0.0066	50.00	48.96	ug/L	-2	10	
Arsenic	E	0.0052	0.0048	100.0	105.9	ug/L	6	10	
Chromium	E	0.0370	0.0248	100.0	98.25	ug/L	-2	10	
Manganese	E	0.0161	0.0126	100.0	98.90	ug/L	-1	10	
Nickel	E	0.0136	0.0102	100.0	97.29	ug/L	-3	10	
Sodium	E	0.0203	0.0066	10000	10090	ug/L	1	10	
Zinc	E	0.0446	0.0089	100.0	103.1	ug/L	3	10	
Iron	H	0.0086	0.0078	10000	10710	ug/L	7	10	
Selenium	H	0.0013	0.0013	100.0	110.1	ug/L	10	10	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	2260963	11.45
Scandium	A	1313225	1425872	8.58
Scandium	E	47570	55603	16.89
Scandium	H	295847	210447	-28.87
Germanium	H	65565	46192	-29.55
Germanium	E	24255	27238	12.30
Indium	A	1797934	1815175	0.96
Bismuth	A	2094425	2015051	-3.79
Yttrium	A	1691104	1796029	6.20
Terbium	A	2896827	2931081	1.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234087 File : 09j01l00087 Time : 02-OCT-2009 02:02
Cal : 899395234001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	13.94	10.00	6.200	ug/L	ib ***
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01330]	0.05000	0.01280	ug/L	!ib
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	[0.07240]	0.1000	0.04707	ug/L	!ib

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	2241597	10.49
Scandium	A	1313225	1371000	4.40
Scandium	E	47570	53788	13.07
Scandium	H	295847	209092	-29.32
Germanium	H	65565	46773	-28.66
Germanium	E	24255	27254	12.36
Indium	A	1797934	1838490	2.26
Bismuth	A	2094425	2080261	-0.68
Yttrium	A	1691104	1774529	4.93
Terbium	A	2896827	2915531	0.65

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234089 File : 09j01l00089 Time : 02-OCT-2009 02:23
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13059, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3008	0.1000	ug/L	!a+
Barium	A	1.599	0.1000	ug/L	!a+
Beryllium	A	[0.02870]	0.1000	ug/L	
Cadmium	A	3.139	0.1000	ug/L	!a+
Lead	A	1.539	0.1000	ug/L	!a+
Silver	A	0.1804	0.1000	ug/L	!a+
Thallium	A	0.08910	0.05000	ug/L	!a+
Arsenic	E	0.6188	0.1000	ug/L	!a+
Chromium	E	11.14	0.1000	ug/L	!a+
Manganese	E	7.544	0.1000	ug/L	!a+
Nickel	E	4.043	0.1000	ug/L	!a+
Zinc	E	8.729	0.1000	ug/L	!a+
Selenium	H	0.1931	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116600	ug/L	117
Calcium	A	300000	345600	ug/L	115
Magnesium	A	100000	111700	ug/L	112
Molybdenum	A	2000	2412	ug/L	121
Potassium	A	100000	117200	ug/L	117
Sodium	E	250000	283100	ug/L	113
Iron	H	250000	289100	ug/L	116

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	1795817	-11.48
Scandium	A	1313225	1228907	-6.42
Scandium	E	47570	52268	9.88
Scandium	H	295847	207931	-29.72
Germanium	H	65565	42353	-35.40
Germanium	E	24255	24913	2.71
Indium	A	1797934	1541152	-14.28
Bismuth	A	2094425	1664179	-20.54
Yttrium	A	1691104	1600460	-5.36
Terbium	A	2896827	2678387	-7.54

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234091 File : 09j01l00091 Time : 02-OCT-2009 02:45
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13060, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	108100	ug/L	8		
Cadmium	A	100.0	110.6	ug/L	11	20	
Calcium	A	300000	332900	ug/L	11		
Magnesium	A	100000	102900	ug/L	3		
Potassium	A	100000	112200	ug/L	12		
Silver	A	50.00	52.42	ug/L	5	20	
Arsenic	E	100.0	114.2	ug/L	14	20	
Chromium	E	200.0	209.8	ug/L	5	20	
Manganese	E	200.0	222.8	ug/L	11	20	
Nickel	E	200.0	189.4	ug/L	-5	20	
Sodium	E	250000	260200	ug/L	4		
Zinc	E	100.0	99.50	ug/L	0	20	
Iron	H	250000	279500	ug/L	12		
Selenium	H	100.0	117.0	ug/L	17	20	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	295847	203137	-31.34
Scandium	A	1313225	1157783	-11.84
Scandium	E	47570	48532	2.02
Germanium	H	65565	43216	-34.09
Germanium	E	24255	23691	-2.33
Indium	A	1797934	1519097	-15.51
Yttrium	A	1691104	1570408	-7.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234101 File : 09j01l00101 Time : 02-OCT-2009 04:30
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13062, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0072	0.0063	10000	9879	ug/L	-1	10	
Antimony	A	0.0032	0.0026	100.0	101.6	ug/L	2	10	
Barium	A	6.6E-4	5.8E-4	100.0	103.9	ug/L	4	10	
Beryllium	A	0.0021	0.0020	100.0	106.5	ug/L	7	10	
Cadmium	A	7.0E-4	6.9E-4	100.0	102.5	ug/L	3	10	
Calcium	A	3.4E-4	1.8E-4	10000	10230	ug/L	2	10	
Lead	A	0.0077	0.0062	100.0	98.75	ug/L	-1	10	
Magnesium	A	0.0066	0.0055	10000	9640	ug/L	-4	10	
Potassium	A	0.0269	0.0060	10000	10270	ug/L	3	10	
Silver	A	0.0031	0.0029	100.0	100.7	ug/L	1	10	
Thallium	A	0.0071	0.0066	50.00	48.96	ug/L	-2	10	
Arsenic	E	0.0052	0.0047	100.0	103.8	ug/L	4	10	
Chromium	E	0.0370	0.0249	100.0	98.66	ug/L	-1	10	
Manganese	E	0.0161	0.0128	100.0	101.1	ug/L	1	10	
Nickel	E	0.0136	0.0102	100.0	97.41	ug/L	-3	10	
Sodium	E	0.0203	0.0064	10000	9826	ug/L	-2	10	
Zinc	E	0.0446	0.0088	100.0	101.2	ug/L	1	10	
Iron	H	0.0086	0.0078	10000	10810	ug/L	8	10	
Selenium	H	0.0013	0.0012	100.0	108.1	ug/L	8	10	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	1982845	-2.26
Scandium	A	1313225	1346503	2.53
Scandium	E	47570	50833	6.86
Scandium	H	295847	212595	-28.14
Germanium	H	65565	48439	-26.12
Germanium	E	24255	25739	6.12
Indium	A	1797934	1809804	0.66
Bismuth	A	2094425	2034092	-2.88
Yttrium	A	1691104	1776046	5.02
Terbium	A	2896827	2958918	2.14

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234102 File : 09j01l00102 Time : 02-OCT-2009 04:40
Cal : 899395234001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	[8.745]	10.00	6.200	ug/L	!ib
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01320]	0.05000	0.01280	ug/L	!ib
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	2014620	-0.70
Scandium	A	1313225	1329184	1.22
Scandium	E	47570	50760	6.71
Scandium	H	295847	211843	-28.39
Germanium	H	65565	49102	-25.11
Germanium	E	24255	26128	7.72
Indium	A	1797934	1862692	3.60
Bismuth	A	2094425	2094897	0.02
Yttrium	A	1691104	1768337	4.57
Terbium	A	2896827	2919581	0.79

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234109 File : 09j01l00109 Time : 02-OCT-2009 05:54
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13062, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0072	0.0064	10000	10050	ug/L	1	10	
Antimony	A	0.0032	0.0025	100.0	101.0	ug/L	1	10	
Barium	A	6.6E-4	5.8E-4	100.0	103.8	ug/L	4	10	
Beryllium	A	0.0021	0.0021	100.0	107.3	ug/L	7	10	
Cadmium	A	7.0E-4	6.8E-4	100.0	101.1	ug/L	1	10	
Calcium	A	3.4E-4	1.8E-4	10000	10190	ug/L	2	10	
Lead	A	0.0077	0.0062	100.0	98.16	ug/L	-2	10	
Magnesium	A	0.0066	0.0056	10000	9806	ug/L	-2	10	
Potassium	A	0.0269	0.0060	10000	10320	ug/L	3	10	
Silver	A	0.0031	0.0029	100.0	100.8	ug/L	1	10	
Thallium	A	0.0071	0.0066	50.00	48.79	ug/L	-2	10	
Arsenic	E	0.0052	0.0047	100.0	103.3	ug/L	3	10	
Chromium	E	0.0370	0.0249	100.0	98.92	ug/L	-1	10	
Manganese	E	0.0161	0.0128	100.0	100.6	ug/L	1	10	
Nickel	E	0.0136	0.0102	100.0	97.28	ug/L	-3	10	
Sodium	E	0.0203	0.0064	10000	9844	ug/L	-2	10	
Zinc	E	0.0446	0.0087	100.0	100.6	ug/L	1	10	
Iron	H	0.0086	0.0079	10000	10840	ug/L	8	10	
Selenium	H	0.0013	0.0012	100.0	107.4	ug/L	7	10	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	2078620	2.46
Scandium	A	1313225	1387360	5.65
Scandium	E	47570	53784	13.06
Scandium	H	295847	214340	-27.55
Germanium	H	65565	48954	-25.34
Germanium	E	24255	27344	12.74
Indium	A	1797934	1842109	2.46
Bismuth	A	2094425	2036565	-2.76
Yttrium	A	1691104	1816248	7.40
Terbium	A	2896827	2980670	2.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234110 File : 09j01l00110 Time : 02-OCT-2009 06:04
Cal : 899395234001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	ND	10.00	6.200	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01900]	0.05000	0.01280	ug/L	!ib
Arsenic	E	[0.05200]	0.1000	0.03563	ug/L	!ib
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	2051175	1.11
Scandium	A	1313225	1362208	3.73
Scandium	E	47570	52359	10.07
Scandium	H	295847	213173	-27.94
Germanium	H	65565	49401	-24.65
Germanium	E	24255	26877	10.81
Indium	A	1797934	1875097	4.29
Bismuth	A	2094425	2113007	0.89
Yttrium	A	1691104	1803222	6.63
Terbium	A	2896827	2968585	2.48

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234121 File : 09j01l00121 Time : 02-OCT-2009 08:00
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13062, S12847

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0072	0.0062	10000	9620	ug/L	-4	10	
Antimony	A	0.0032	0.0025	100.0	100.1	ug/L	0	10	
Barium	A	6.6E-4	5.9E-4	100.0	105.3	ug/L	5	10	
Beryllium	A	0.0021	0.0020	100.0	104.6	ug/L	5	10	
Cadmium	A	7.0E-4	6.7E-4	100.0	100.7	ug/L	1	10	
Calcium	A	3.4E-4	1.8E-4	10000	10290	ug/L	3	10	
Lead	A	0.0077	0.0062	100.0	97.57	ug/L	-2	10	
Magnesium	A	0.0066	0.0053	10000	9219	ug/L	-8	10	
Potassium	A	0.0269	0.0060	10000	10320	ug/L	3	10	
Silver	A	0.0031	0.0028	100.0	98.68	ug/L	-1	10	
Thallium	A	0.0071	0.0066	50.00	49.00	ug/L	-2	10	
Arsenic	E	0.0052	0.0046	100.0	102.5	ug/L	3	10	
Chromium	E	0.0370	0.0244	100.0	96.65	ug/L	-3	10	
Manganese	E	0.0161	0.0128	100.0	101.1	ug/L	1	10	
Nickel	E	0.0136	0.0100	100.0	95.66	ug/L	-4	10	
Sodium	E	0.0203	0.0064	10000	9721	ug/L	-3	10	
Zinc	E	0.0446	0.0087	100.0	99.82	ug/L	0	10	
Iron	H	0.0086	0.0080	10000	11020	ug/L	10	10	
Selenium	H	0.0013	0.0012	100.0	109.5	ug/L	10	10	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	1898924	-6.40
Scandium	A	1313225	1343672	2.32
Scandium	E	47570	51695	8.67
Scandium	H	295847	183264	-38.05
Germanium	H	65565	42708	-34.86
Germanium	E	24255	26354	8.65
Indium	A	1797934	1865971	3.78
Bismuth	A	2094425	2018803	-3.61
Yttrium	A	1691104	1834562	8.48
Terbium	A	2896827	2974950	2.70

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234122 File : 09j01l00122 Time : 02-OCT-2009 08:10
Cal : 899395234001 Caldate : 01-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	17.26	10.00	6.200	ug/L	ib ***
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01660]	0.05000	0.01280	ug/L	!ib
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	[0.06490]	0.1000	0.04043	ug/L	!ib
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	133.2	10.00	5.161	ug/L	ib ***
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	[0.05450]	0.1000	0.04707	ug/L	!ib

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	1897394	-6.47
Scandium	A	1313225	1324374	0.85
Scandium	E	47570	50139	5.40
Scandium	H	295847	179710	-39.26
Germanium	H	65565	42482	-35.21
Germanium	E	24255	25814	6.43
Indium	A	1797934	1873326	4.19
Bismuth	A	2094425	2069604	-1.19
Yttrium	A	1691104	1797431	6.29
Terbium	A	2896827	2944029	1.63

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234138 File : 09j01l00138 Time : 02-OCT-2009 10:55
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13059, S12847

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3789	0.1000	ug/L	!a+
Barium	A	1.612	0.1000	ug/L	!a+
Beryllium	A	[0.03100]	0.1000	ug/L	
Cadmium	A	3.137	0.1000	ug/L	!a+
Lead	A	1.544	0.1000	ug/L	!a+
Silver	A	0.1749	0.1000	ug/L	!a+
Thallium	A	0.09820	0.05000	ug/L	!a+
Arsenic	E	0.4114	0.1000	ug/L	!a+
Chromium	E	11.60	0.1000	ug/L	!a+
Manganese	E	7.607	0.1000	ug/L	!a+
Nickel	E	4.086	0.1000	ug/L	!a+
Zinc	E	8.337	0.1000	ug/L	!a+
Selenium	H	0.2793	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	112600	ug/L	113
Calcium	A	300000	351000	ug/L	117
Magnesium	A	100000	107200	ug/L	107
Molybdenum	A	2000	2428	ug/L	121
Potassium	A	100000	117800	ug/L	118
Sodium	E	250000	276700	ug/L	111
Iron	H	250000	302300	ug/L	121

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2028747	1585291	-21.86
Scandium	A	1313225	1166269	-11.19
Scandium	E	47570	46430	-2.40
Scandium	H	295847	165739	-43.98
Germanium	H	65565	35316	-46.14
Germanium	E	24255	22831	-5.87
Indium	A	1797934	1515410	-15.71
Bismuth	A	2094425	1601892	-23.52
Yttrium	A	1691104	1571831	-7.05
Terbium	A	2896827	2585707	-10.74

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899395234139 File : 09j01l00139 Time : 02-OCT-2009 11:05
Cal : 899395234001 Caldate : 01-OCT-2009
Standards: S13060, S12847

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104600	ug/L	5		
Cadmium	A	100.0	108.9	ug/L	9	20	
Calcium	A	300000	328700	ug/L	10		
Magnesium	A	100000	98540	ug/L	-1		
Potassium	A	100000	110700	ug/L	11		
Silver	A	50.00	51.45	ug/L	3	20	
Arsenic	E	100.0	115.4	ug/L	15	20	
Chromium	E	200.0	211.3	ug/L	6	20	
Manganese	E	200.0	225.0	ug/L	13	20	
Nickel	E	200.0	192.1	ug/L	-4	20	
Sodium	E	250000	259600	ug/L	4		
Zinc	E	100.0	101.1	ug/L	1	20	
Iron	H	250000	286900	ug/L	15		
Selenium	H	100.0	118.6	ug/L	19	20	

ISTD (ICALBLK 09j01l00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	295847	172362	-41.74
Scandium	A	1313225	1165976	-11.21
Scandium	E	47570	45586	-4.17
Germanium	H	65565	37042	-43.50
Germanium	E	24255	22510	-7.19
Indium	A	1797934	1522115	-15.34
Yttrium	A	1691104	1583878	-6.34

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899396748

Instrument : MET16 Begun : 10/02/09 12:28
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09j02m00001	TUN				10/02/09 12:28	1.0	1	
002	09j02m00002	X	RINSE			10/02/09 12:34	1.0	2	
003	09j02m00003	ICALBLK	CALBLANK			10/02/09 12:45	1.0	2	
004	09j02m00004	ICAL				10/02/09 12:55	1.0	3 2	
005	09j02m00005	ICAL				10/02/09 13:06	1.0	4 2	
006	09j02m00006	ICAL				10/02/09 13:16	1.0	5 2	
007	09j02m00007	ICAL				10/02/09 13:27	1.0	6 2	
008	09j02m00008	ICAL				10/02/09 13:37	1.0	7 2	
009	09j02m00009	ICAL				10/02/09 13:48	1.0	8 2	
010	09j02m00010	ICV				10/02/09 13:58	1.0	9 2	
011	09j02m00011	ICB				10/02/09 14:08	1.0	2	
012	09j02m00012	X				10/02/09 14:19	1.0	2	
013	09j02m00013	ICSA				10/02/09 14:29	1.0	10 2	7:CA=350000
014	09j02m00014	ICSAB				10/02/09 14:40	1.0	11 2	13:CA=320000
015	09j02m00015	X	RINSE			10/02/09 14:50	1.0	2	
016	09j02m00016	X	RINSE			10/02/09 15:01	1.0	2	
017	09j02m00017	BLANK	QC514509	Filtrate	155517	10/02/09 15:11	5.0	2	
018	09j02m00018	BS	QC514510	Filtrate	155517	10/02/09 15:22	5.0	2	
019	09j02m00019	BSD	QC514511	Filtrate	155517	10/02/09 15:32	5.0	2	
020	09j02m00020	MSS	215256-001	Filtrate	155517	10/02/09 15:43	1000	2	
021	09j02m00021	BLANK	QC514509	Filtrate	155517	10/02/09 15:57	5.0	2	
022	09j02m00022	BS	QC514510	Filtrate	155517	10/02/09 16:07	5.0	2	
023	09j02m00023	BSD	QC514511	Filtrate	155517	10/02/09 16:18	5.0	2	
024	09j02m00024	SER	QC514514	Filtrate	155517	10/02/09 16:28	5000	2	
025	09j02m00025	CCV				10/02/09 16:39	1.0	12 2	
026	09j02m00026	CCB				10/02/09 16:49	1.0	2	
027	09j02m00027	MS	QC514512	Filtrate	155517	10/02/09 16:56	500.0	2	
028	09j02m00028	MSD	QC514513	Filtrate	155517	10/02/09 17:06	500.0	2	
029	09j02m00029	PDS	QC514515	Filtrate	155517	10/02/09 17:17	1000	13 14 2	
030	09j02m00030	MSS	215256-001	Filtrate	155517	10/02/09 17:27	50.0	2	2:NA=140000
031	09j02m00031	SER	QC514514	Filtrate	155517	10/02/09 17:38	250.0	2	
032	09j02m00032	PDS	QC514515	Filtrate	155517	10/02/09 17:48	50.0	13 14 2	1:NA=140000
033	09j02m00033	SAMPLE	215256-002	Filtrate	155517	10/02/09 17:59	5.0	2	5:NA=610000
034	09j02m00034	SAMPLE	215072-005	Filtrate	155517	10/02/09 18:09	5.0	2	1:NA=43000
035	09j02m00035	CCV				10/02/09 18:20	1.0	12 2	
036	09j02m00036	CCB				10/02/09 18:30	1.0	2	
037	09j02m00037	BLANK	QC514300	Filtrate	155465	10/02/09 18:41	5.0	2	
038	09j02m00038	BS	QC514301	Filtrate	155465	10/02/09 18:51	5.0	2	
039	09j02m00039	BSD	QC514302	Filtrate	155465	10/02/09 19:02	5.0	2	
040	09j02m00040	MSS	215216-001	Filtrate	155465	10/02/09 19:12	5.0	2	6:NA=860000
041	09j02m00041	SER	QC514307	Filtrate	155465	10/02/09 19:23	25.0	2	
042	09j02m00042	MS	QC514303	Filtrate	155465	10/02/09 19:33	5.0	2	3:NA=880000
043	09j02m00043	MSD	QC514304	Filtrate	155465	10/02/09 19:44	5.0	2	3:NA=810000
044	09j02m00044	PDS	QC514308	Filtrate	155465	10/02/09 19:54	5.0	13 14 2	3:NA=830000
045	09j02m00045	MSS	215216-011	Filtrate	155465	10/02/09 20:05	5.0	2	6:NA=950000
046	09j02m00046	MS	QC514305	Filtrate	155465	10/02/09 20:15	5.0	2	3:NA=940000
047	09j02m00047	CCV				10/02/09 20:26	1.0	12 2	
048	09j02m00048	CCB				10/02/09 20:36	1.0	2	
049	09j02m00049	MSD	QC514306	Filtrate	155465	10/02/09 20:47	5.0	2	3:NA=950000
050	09j02m00050	SAMPLE	215216-002	Filtrate	155465	10/02/09 20:57	5.0	2	6:NA=1000000
051	09j02m00051	SAMPLE	215216-003	Filtrate	155465	10/02/09 21:08	5.0	2	6:NA=1000000
052	09j02m00052	SAMPLE	215216-004	Filtrate	155465	10/02/09 21:18	5.0	2	5:NA=780000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899396748

Instrument : MET16 Begun : 10/02/09 12:28
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09j02m00053	SAMPLE	215216-005	Filtrate	155465	10/02/09 21:29	5.0	2	5:NA=800000
054	09j02m00054	SAMPLE	215216-006	Filtrate	155465	10/02/09 21:39	5.0	2	5:NA=790000
055	09j02m00055	SAMPLE	215216-007	Filtrate	155465	10/02/09 21:50	5.0	2	5:NA=1000000
056	09j02m00056	SAMPLE	215216-008	Filtrate	155465	10/02/09 22:00	5.0	2	5:NA=1100000
057	09j02m00057	SAMPLE	215216-009	Filtrate	155465	10/02/09 22:11	5.0	2	5:NA=1200000
058	09j02m00058	SAMPLE	215216-010	Filtrate	155465	10/02/09 22:21	5.0	2	5:NA=1100000
059	09j02m00059	CCV				10/02/09 22:32	1.0	12 2	
060	09j02m00060	CCB				10/02/09 22:42	1.0	2	
061	09j02m00061	CCV				10/02/09 22:53	1.0	12 2	
062	09j02m00062	CCB				10/02/09 23:03	1.0	2	
063	09j02m00063	TUN				10/02/09 23:15	1.0	1	
064	09j02m00064	X	RINSE			10/02/09 23:20	1.0	2	
065	09j02m00065	MSS	215216-001	Filtrate	155465	10/02/09 23:31	5.0	2	6:NA=830000
066	09j02m00066	SER	QC514307	Filtrate	155465	10/02/09 23:41	25.0	2	
067	09j02m00067	MS	QC514303	Filtrate	155465	10/02/09 23:52	5.0	2	3:NA=850000
068	09j02m00068	MSD	QC514304	Filtrate	155465	10/03/09 00:02	5.0	2	3:NA=800000
069	09j02m00069	PDS	QC514308	Filtrate	155465	10/03/09 00:13	5.0	13 14 2	
070	09j02m00070	MSS	215216-011	Filtrate	155465	10/03/09 00:23	5.0	2	6:NA=930000
071	09j02m00071	MS	QC514305	Filtrate	155465	10/03/09 00:34	5.0	2	3:NA=930000
072	09j02m00072	MSD	QC514306	Filtrate	155465	10/03/09 00:44	5.0	2	3:NA=930000
073	09j02m00073	SAMPLE	215216-002	Filtrate	155465	10/03/09 00:55	5.0	2	6:NA=1000000
074	09j02m00074	SAMPLE	215216-003	Filtrate	155465	10/03/09 01:05	5.0	2	6:NA=1000000
075	09j02m00075	CCV				10/03/09 01:16	1.0	12 2	
076	09j02m00076	CCB				10/03/09 01:26	1.0	2	
077	09j02m00077	ICSA				10/03/09 01:37	1.0	10 2	7:CA=350000
078	09j02m00078	ICSAB				10/03/09 01:47	1.0	11 2	11:CA=330000
079	09j02m00079	X	RINSE			10/03/09 01:58	1.0	2	
080	09j02m00080	X	RINSE			10/03/09 02:08	1.0	2	
081	09j02m00081	SAMPLE	215216-004	Filtrate	155465	10/03/09 02:19	5.0	2	5:NA=750000
082	09j02m00082	SAMPLE	215216-005	Filtrate	155465	10/03/09 02:29	5.0	2	5:NA=780000
083	09j02m00083	SAMPLE	215216-006	Filtrate	155465	10/03/09 02:40	5.0	2	5:NA=770000
084	09j02m00084	SAMPLE	215216-007	Filtrate	155465	10/03/09 02:50	5.0	2	5:NA=1000000
085	09j02m00085	SAMPLE	215216-008	Filtrate	155465	10/03/09 03:01	5.0	2	5:NA=1100000
086	09j02m00086	SAMPLE	215216-009	Filtrate	155465	10/03/09 03:12	5.0	2	5:NA=1100000
087	09j02m00087	SAMPLE	215216-010	Filtrate	155465	10/03/09 03:22	5.0	2	5:NA=1000000
088	09j02m00088	CCV				10/03/09 03:33	1.0	12 2	
089	09j02m00089	CCB				10/03/09 03:43	1.0	2	
090	09j02m00090	BLANK	QC514502	Filtrate	155516	10/03/09 03:54	5.0	2	
091	09j02m00091	BS	QC514503	Filtrate	155516	10/03/09 04:04	5.0	2	
092	09j02m00092	BSD	QC514504	Filtrate	155516	10/03/09 04:15	5.0	2	
093	09j02m00093	MSS	215297-003	Filtrate	155516	10/03/09 04:25	5.0	2	1:NA=91000
094	09j02m00094	SER	QC514507	Filtrate	155516	10/03/09 04:36	25.0	2	
095	09j02m00095	MS	QC514505	Filtrate	155516	10/03/09 04:46	5.0	2	
096	09j02m00096	MSD	QC514506	Filtrate	155516	10/03/09 04:57	5.0	2	
097	09j02m00097	PDS	QC514508	Filtrate	155516	10/03/09 05:07	5.0	2 13 14	1:NA=95000
098	09j02m00098	SAMPLE	215297-002	Filtrate	155516	10/03/09 05:18	5.0	2	1:NA=81000
099	09j02m00099	SAMPLE	215297-004	Filtrate	155516	10/03/09 05:28	5.0	2	1:NA=98000
100	09j02m00100	CCV				10/03/09 05:39	1.0	12 2	
101	09j02m00101	CCB				10/03/09 05:49	1.0	2	
102	09j02m00102	SAMPLE	215297-005	Filtrate	155516	10/03/09 06:00	5.0	2	1:NA=110000
103	09j02m00103	SAMPLE	215303-018	Filtrate	155516	10/03/09 06:10	5.0	2	
104	09j02m00104	SAMPLE	215303-019	Filtrate	155516	10/03/09 06:21	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899396748

Instrument : MET16 Begun : 10/02/09 12:28
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	09j02m00105	SAMPLE	215303-020	Filtrate	155516	10/03/09 06:32	5.0	2	
106	09j02m00106	SAMPLE	215303-021	Filtrate	155516	10/03/09 06:42	5.0	2	
107	09j02m00107	SAMPLE	215303-022	Filtrate	155516	10/03/09 06:53	5.0	2	
108	09j02m00108	CCV				10/03/09 07:03	1.0	12 2	
109	09j02m00109	CCB				10/03/09 07:14	1.0	2	
110	09j02m00110	BLANK	QC514717	Water	155566	10/03/09 07:24	5.0	2	
111	09j02m00111	BS	QC514718	Water	155566	10/03/09 07:35	5.0	2	
112	09j02m00112	BSD	QC514719	Water	155566	10/03/09 07:45	5.0	2	
113	09j02m00113	MSS	215303-001	Water	155566	10/03/09 07:56	5.0	2	
114	09j02m00114	SER	QC514724	Water	155566	10/03/09 08:06	25.0	2	
115	09j02m00115	MS	QC514720	Water	155566	10/03/09 08:17	5.0	2	
116	09j02m00116	MSD	QC514721	Water	155566	10/03/09 08:27	5.0	2	
117	09j02m00117	PDS	QC514725	Water	155566	10/03/09 08:38	5.0	13 14 2	
118	09j02m00118	MSS	215303-002	Water	155566	10/03/09 08:48	5.0	2	
119	09j02m00119	MS	QC514722	Water	155566	10/03/09 08:59	5.0	2	1:CA=22000
120	09j02m00120	CCV				10/03/09 09:09	1.0	12 2	
121	09j02m00121	CCB				10/03/09 09:20	1.0	2	
122	09j02m00122	MSD	QC514723	Water	155566	10/03/09 09:30	5.0	2	1:CA=22000
123	09j02m00123	SAMPLE	215303-003	Water	155566	10/03/09 09:41	5.0	2	
124	09j02m00124	TUN				10/03/09 09:52	1.0	1	
125	09j02m00125	X	RINSE			10/03/09 09:58	1.0	2	
126	09j02m00126	SAMPLE	215303-004	Water	155566	10/03/09 10:08	5.0	2	
127	09j02m00127	SAMPLE	215303-005	Water	155566	10/03/09 10:19	5.0	2	
128	09j02m00128	SAMPLE	215303-006	Water	155566	10/03/09 10:30	5.0	2	
129	09j02m00129	SAMPLE	215303-007	Water	155566	10/03/09 10:40	5.0	2	
130	09j02m00130	SAMPLE	215303-008	Water	155566	10/03/09 10:51	5.0	2	
131	09j02m00131	SAMPLE	215303-009	Water	155566	10/03/09 11:01	5.0	2	
132	09j02m00132	SAMPLE	215303-010	Water	155566	10/03/09 11:12	5.0	2	
133	09j02m00133	SAMPLE	215303-011	Water	155566	10/03/09 11:22	5.0	2	
134	09j02m00134	CCV				10/03/09 11:33	1.0	12 2	
135	09j02m00135	CCB				10/03/09 11:44	1.0	2	
136	09j02m00136	SAMPLE	215303-012	Water	155566	10/03/09 11:55	5.0	2	
137	09j02m00137	SAMPLE	215303-013	Water	155566	10/03/09 12:05	5.0	2	
138	09j02m00138	SAMPLE	215303-014	Water	155566	10/03/09 12:16	5.0	2	
139	09j02m00139	SAMPLE	215303-015	Water	155566	10/03/09 12:26	5.0	2	
140	09j02m00140	ICSA				10/03/09 12:37	1.0	10 2	7:CA=340000
141	09j02m00141	ICSAB				10/03/09 12:47	1.0	11 2	11:CA=320000
142	09j02m00142	X	RINSE			10/03/09 12:58	1.0	2	
143	09j02m00143	X	RINSE			10/03/09 13:08	1.0	2	
144	09j02m00144	SAMPLE	215303-016	Water	155566	10/03/09 13:19	5.0	2	
145	09j02m00145	SAMPLE	215303-017	Water	155566	10/03/09 13:30	5.0	2	
146	09j02m00146	SAMPLE	215303-018	Water	155566	10/03/09 13:40	5.0	2	
147	09j02m00147	CCV				10/03/09 13:51	1.0	12 2	
148	09j02m00148	CCB				10/03/09 14:01	1.0	2	
149	09j02m00149	ICSA				10/03/09 14:12	1.0	10 2	7:CA=340000
150	09j02m00150	ICSAB				10/03/09 14:22	1.0	11 2	11:CA=340000
151	09j02m00151	X	RINSE			10/03/09 14:33	1.0	2	
152	09j02m00152	X	RINSE			10/03/09 14:43	1.0	2	
153	09j02m00153	X	RINSE			10/03/09 14:54	1.0	2	

JYF 10/04/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 150.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 899396748

Instrument : MET16 Begun : 10/02/09 12:28
Method : EPA 6020 SOP Version : icpms_rv5

Standards used: 1=S13057 2=S13058 3=S13065 4=S13066 5=S13067 6=S13068 7=S13063 8=S13064 9=S13061 10=S13059 11=S13060 12=S13062 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899396748

Date : 10/02/09 Reference : 09j02m00003
Sequence : MET16 09j02m00 Analyzed : 10/02/09 12:45

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1622503	1172094	44815	283259	67917	23474	1758598	1924023	1657531	2731184
		LOWER LIMIT	486751	351628	13445	84978	20375	7042	527579	577207	497259	819355
		UPPER LIMIT	1947004	1406513	53778	339911	81500	28169	2110318	2308828	1989037	3277421
011	ICB		1548276	1122826	42721	272437	66038	22485	1700812	1901641	1612110	2685003
013	ICSA		1368261	1063647	43399	287985	63293	21452	1410873	1498230	1468569	2440018
014	ICSAB		1254393	1023231	40418	285275	63608	20348	1390403	1492066	1443156	2434162
017	BLANK	QC514509	1304307	985790	39095	254868	62738	21198	1511405	1725687	1436838	2407196
018	BS	QC514510	1349347	1037600	39062	260963	63146	20868	1566063	1769493	1496192	2523421
019	BSD	QC514511	1407600	1063102	40043	264614	64059	20991	1588651	1765529	1516762	2527545
020	MSS	215256-001	1472973	1094132	40046	266326	65064	21388	1607066	1781074	1562051	2519839
021	BLANK	QC514509	1509910	1115450	41923	274285	65500	22063	1614522	1775330	1559733	2526513
022	BS	QC514510	1481983	1090052	40770	273283	65340	21453	1582264	1759863	1521345	2494452
023	BSD	QC514511	1541572	1128420	42235	273139	65300	22035	1599038	1768418	1571681	2529457
024	SER	QC514514	1526064	1130125	41683	277780	66783	22022	1634318	1796136	1567053	2545697
025	CCV		1534198	1137891	42653	284660	66260	21899	1561409	1697013	1546991	2492494
026	CCB		1572561	1148061	42193	276318	66552	21933	1643311	1792924	1580764	2536726
027	MS	QC514512	1583930	1157688	43022	281526	67532	22498	1632702	1800449	1624161	2572971
028	MSD	QC514513	1553092	1148724	43536	278071	66770	22562	1624407	1792266	1601846	2543537
029	PDS	QC514515	1524205	1128155	41829	281699	66281	21479	1550737	1705503	1562737	2511725
030	MSS	215256-001	1531036	1153453	41849	283946	65395	20433	1544106	1664136	1779389	2507751
031	SER	QC514514	1540687	1118695	41903	273559	65780	21857	1585201	1746476	1594537	2526895
032	PDS	QC514515	1467456	1122651	42390	286565	64930	21131	1494393	1616632	1729370	2435287
033	SAMPLE	215256-002	1447698	1118708	43502	289950	63497	20794	1446143	1461804	1483341	2346699
034	SAMPLE	215072-005	1435231	1071349	40351	267209	64214	21137	1523846	1671130	1493368	2436166
035	CCV		1493242	1125754	41927	277471	65710	21583	1564708	1711124	1546892	2509803
036	CCB		1518467	1115216	41811	272098	65502	21749	1602478	1761087	1540241	2499374
037	BLANK	QC514300	1502052	1095883	42425	269646	64885	22014	1595232	1757536	1533668	2475273
038	BS	QC514301	1539971	1121785	42703	279555	66270	22184	1602538	1764786	1564532	2524822
039	BSD	QC514302	1522923	1106691	42764	274030	65663	22198	1586927	1752922	1550645	2504654
040	MSS	215216-001	1698054	1269086	49708	297904	64946	22884	1494998	1442287	1597036	2348124
041	SER	QC514307	1588739	1175875	45833	285363	65458	22417	1556868	1587441	1568121	2461099
042	MS	QC514303	1648081	1273563	49983	298209	63842	22834	1497868	1432445	1596178	2356953
043	MSD	QC514304	1631461	1276847	50540	305389	65582	23079	1527036	1460340	1614268	2395283
044	PDS	QC514308	1582755	1269111	50536	305673	65443	22836	1513155	1459221	1614957	2397636
045	MSS	215216-011	1651034	1298354	52226	309815	66194	23479	1544547	1447167	1632393	2405850
046	MS	QC514305	1620771	1297598	52809	307904	65885	23736	1540604	1462412	1649474	2431724
047	CCV		1561382	1213393	48321	296789	70460	24647	1678656	1761550	1684312	2642902
048	CCB		1543565	1164571	46796	280528	68492	23969	1675756	1790222	1634714	2567603
049	MSD	QC514306	1589979	1278076	50035	304315	64904	22818	1520122	1444302	1614503	2416102
050	SAMPLE	215216-002	1652535	1345418	53903 *	300571	64329	23910	1567620	1458959	1682295	2431254
051	SAMPLE	215216-003	1342334	1107476	45123	285639	61398	20586	1396650	1382582	1469121	2256165
052	SAMPLE	215216-004	1433263	1208930	47807	286740	61524	22113	1487063	1468583	2219268 *	2418858
053	SAMPLE	215216-005	1459807	1208793	47600	273883	60482	22390	1521646	1484200	1833319	2411985
054	SAMPLE	215216-006	1463184	1196408	47766	276540	60889	22122	1510018	1477422	1817213	2395612
055	SAMPLE	215216-007	1503926	1223409	48838	279546	60933	22426	1513650	1420698	1596688	2381744
056	SAMPLE	215216-008	1554894	1265013	51391	281483	60372	23147	1525594	1412230	1621753	2394861
057	SAMPLE	215216-009	1567736	1289063	50661	280214	60097	22791	1523822	1416821	1636744	2401830
058	SAMPLE	215216-010	1634530	1344563	51312	285468	61774	23244	1593320	1480243	1709089	2498568
059	CCV		1683010	1313478	50888	301746	70813	25609	1780428	1807375	1796417	2750871
060	CCB		1704596	1296625	50273	294404	71144	25786	1832683	1876609	1800987	2762496
061	CCV		1681888	1295993	50753	301211	70779	25457	1771426	1807399	1759039	2717632

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899396748

Date : 10/02/09 Reference : 09j02m00003
Sequence : MET16 09j02m00 Analyzed : 10/02/09 12:45

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
062	CCB		1678686	1269752	49154	295291	70904	25152	1794984	1871005	1758574	2712389
065	MSS	215216-001	1642930	1320541	50129	284639	62046	23157	1599877	1481586	1677134	2485778
066	SER	QC514307	1704249	1338947	51035	289185	66465	25008	1730257	1691185	1776998	2670849
067	MS	QC514303	1642858	1321256	50710	286054	61651	23250	1583918	1477332	1696526	2471680
068	MSD	QC514304	1655771	1343953	51569	289349	62492	23707	1612124	1496800	1724316	2516767
069	PDS	QC514308	1613875	1316205	51305	293230	63158	23483	1590741	1481242	1701881	2501270
070	MSS	215216-011	1650692	1344266	52897	285925	61781	24024	1603131	1463531	1721205	2473020
071	MS	QC514305	1618865	1338159	52933	288169	62073	23900	1588157	1460889	1712499	2464652
072	MSD	QC514306	1617067	1354935	52366	287295	61908	24033	1601442	1473811	1735774	2490841
073	SAMPLE	215216-002	1674157	1384452	54028 *	281041	60886	24496	1613959	1459823	1753622	2479805
074	SAMPLE	215216-003	1368951	1150288	45956	274471	58906	20853	1459727	1389686	1524406	2297821
075	CCV		1562278	1247309	48558	274556	65785	24614	1750573	1794946	1742638	2699820
076	CCB		1558183	1219846	47332	261188	63862	24317	1772800	1827070	1722332	2656500
077	ICSA		1444182	1182830	48286	273246	60355	23380	1514216	1501437	1614641	2511899
078	ICSAB		1371545	1128375	46336	271462	60992	22453	1488087	1477378	1568017	2463150
081	SAMPLE	215216-004	1360734	1181654	47092	262227	58068	21927	1496441	1442850	2232100 *	2425111
082	SAMPLE	215216-005	1379173	1156735	46177	248354	55927	21922	1510060	1448337	1818750	2385886
083	SAMPLE	215216-006	1373921	1159318	46034	250017	56404	21590	1509048	1447906	1806077	2398646
084	SAMPLE	215216-007	1390335	1180541	46902	248193	54838	21757	1492020	1388354	1581237	2340900
085	SAMPLE	215216-008	1429153	1214760	47802	243638	53426	21883	1511281	1388000	1601156	2348460
086	SAMPLE	215216-009	1418154	1202568	47518	243129	53186	21681	1487354	1368678	1584208	2331717
087	SAMPLE	215216-010	1422345	1221931	47604	242468	53092	21904	1512914	1389969	1606068	2356094
088	CCV		1468864	1198485	46292	259056	62183	23753	1718770	1757626	1704677	2682418
089	CCB		1448391	1151499	44885	251878	62001	23562	1738442	1828566	1676988	2665983
090	BLANK	QC514502	1410986	1124850	44596	248056	61482	23348	1735841	1831702	1661670	2668189
091	BS	QC514503	1412142	1139999	44366	241969	60117	23425	1721206	1833441	1679159	2680433
092	BSD	QC514504	1405091	1136339	44539	241516	60174	23525	1724361	1845971	1670403	2679435
093	MSS	215297-003	1317379	1077444	42283	235141	58213	22378	1612144	1693686	1578366	2576046
094	SER	QC514507	1363555	1102626	43168	242040	60540	23140	1694061	1800468	1620005	2630359
095	MS	QC514505	1318392	1109191	43109	241360	59348	22799	1648516	1707998	1627362	2601754
096	MSD	QC514506	1310748	1110742	43086	242456	59324	22769	1653762	1704066	1638840	2645333
097	PDS	QC514508	1322956	1122524	43610	244957	59505	22660	1643878	1663653	1636141	2604930
098	SAMPLE	215297-002	1306764	1098052	42827	237725	58865	22610	1645438	1694374	1626286	2596199
099	SAMPLE	215297-004	1260615	1080862	42275	235416	58313	22377	1635258	1695456	1599472	2585371
100	CCV		1404490	1188004	46250	250798	60986	23932	1719489	1777908	1721561	2688815
101	CCB		1446993	1172880	45934	247237	61315	24066	1767231	1826491	1716234	2672242
102	SAMPLE	215297-005	1269951	1077615	42684	241488	59231	22323	1611446	1672286	1587825	2554166
103	SAMPLE	215303-018	1311092	1110482	43027	241836	60813	23058	1710458	1796974	1641871	2633146
104	SAMPLE	215303-019	1333176	1097606	44048	264864	64127	23760	1670701	1764032	1612256	2598799
105	SAMPLE	215303-020	1304455	1115930	43281	242009	60771	23059	1693979	1796289	1638850	2640523
106	SAMPLE	215303-021	1291939	1095395	42813	242684	60514	23019	1688167	1797073	1623644	2632565
107	SAMPLE	215303-022	1282922	1092407	42701	241835	60169	22824	1700226	1804052	1619019	2658050
108	CCV		1445751	1224647	47952	263165	63074	24567	1751489	1790543	1749299	2690694
109	CCB		1483411	1213974	46380	255781	62783	24425	1785581	1847295	1746787	2708597
110	BLANK	QC514717	1423164	1181707	46349	251591	62005	24013	1767686	1842791	1716454	2687662
111	BS	QC514718	1456333	1209472	47331	257299	62570	24799	1779147	1838087	1732992	2710295
112	BSD	QC514719	1476408	1212330	46744	260759	63387	24500	1786306	1835872	1751026	2713383
113	MSS	215303-001	1379889	1143719	43936	254872	62392	23261	1705525	1800363	1665496	2650214
114	SER	QC514724	1400293	1161972	45250	259021	64265	23775	1744469	1818605	1689354	2673079
115	MS	QC514720	1433543	1189522	45251	269396	64841	23840	1751723	1810343	1720272	2710973
116	MSD	QC514721	1457256	1218026	46935	263912	64216	24359	1780924	1825987	1748734	2741424
117	PDS	QC514725	1468491	1223081	47234	270399	64526	24125	1730316	1752301	1726348	2692692

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 899396748

Date : 10/02/09 Reference : 09j02m00003
Sequence : MET16 09j02m00 Analyzed : 10/02/09 12:45

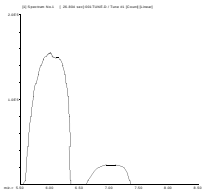
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
118	MSS	215303-002	1405295	1189637	45620	266008	64560	23800	1731610	1801739	1687896	2672724
119	MS	QC514722	1439736	1211085	45401	262781	63366	23716	1732600	1798655	1705495	2689126
120	CCV		1440938	1209802	46511	262819	62879	24001	1731745	1768853	1728970	2687283
121	CCB		1442869	1186743	45474	259479	63054	23627	1753450	1814741	1712059	2654681
122	MSD	QC514723	1410379	1176709	44900	261493	63378	23385	1704551	1782702	1664126	2632607
123	SAMPLE	215303-003	1392337	1143937	44070	256436	62911	23076	1704979	1789429	1661146	2639664
126	SAMPLE	215303-004	1333186	1110941	42839	250576	62026	22656	1669267	1783298	1619978	2635992
127	SAMPLE	215303-005	1343188	1112448	43005	253422	62547	22534	1691137	1786299	1637172	2640797
128	SAMPLE	215303-006	1320003	1094141	42123	253365	62403	22430	1672748	1775027	1604539	2599855
129	SAMPLE	215303-007	1306922	1082091	41682	253414	62133	22040	1658119	1771809	1586049	2589419
130	SAMPLE	215303-008	1269627	1067398	40873	251032	62186	21635	1641613	1770363	1568055	2573403
131	SAMPLE	215303-009	1278128	1068737	41076	252136	62337	21837	1644449	1779869	1574416	2576358
132	SAMPLE	215303-010	1277144	1068714	41030	254036	62459	21887	1640950	1765994	1562390	2565569
133	SAMPLE	215303-011	1276368	1067282	40990	253976	62619	21628	1659547	1776719	1574237	2580691
134	CCV		1357660	1144034	43870	264210	63244	22657	1671110	1765637	1648482	2654289
135	CCB		1386080	1137487	43718	264042	63974	22805	1724794	1820866	1660298	2650458
136	SAMPLE	215303-012	1316914	1107476	41807	260436	63587	21899	1663594	1772292	1594703	2614138
137	SAMPLE	215303-013	1293770	1084864	42207	259847	63518	22505	1654395	1767874	1598160	2594796
138	SAMPLE	215303-014	1208241	1020655	41171	258288	63152	21717	1551206	1668057	1497273	2432110
139	SAMPLE	215303-015	1293932	1084570	41523	259335	63736	21804	1655207	1772618	1585532	2586495
140	ICSA		1172440	1052557	41598	258467	58069	20560	1410335	1427124	1489471	2389972
141	ICSAB		1076852	999748	38731	254246	57807	19607	1372161	1390429	1439473	2322133
144	SAMPLE	215303-016	972256	833473	36232	228300	57458	19480	1363486	1488617	1302994	2171804
145	SAMPLE	215303-017	1114566	1013650	34645	201664	50194	19130	1630025	1755436	1540070	2580747
146	SAMPLE	215303-018	1066834	931548	35823	223233	56223	19367	1533232	1653215	1439986	2414242
147	CCV		1066646	939182	36299	226757	55872	19145	1476487	1623812	1445939	2402930
148	CCB		1099921	936809	36168	226859	56992	19523	1544452	1696692	1455763	2429353
149	ICSA		953463	888662	35243	232289	53485	18107	1254636	1316907	1310298	2165708
150	ICSAB		861198	772066	32727	231125	54142	16871	1204024	1265683	1225498	2078862

MET16 QC Tune Report

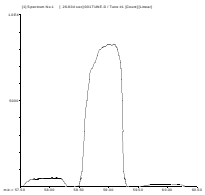
Data File: C:\ICPCHEM\1\DATA\09J02m00.B\001TUNE.D
Date Acquired: Oct 2 2009 12:28 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

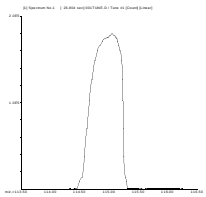
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	131248	132716	132858	132751	0.82	5.00	
59 Co	48270	47986	48172	48036	1.20	5.00	
115 In	996071	985535	990555	990097	1.17	5.00	
205 Tl	82017	82433	83016	82484	0.38	5.00	



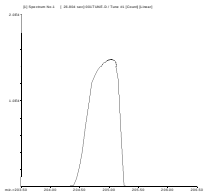
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



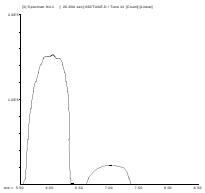
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET16 QC Tune Report

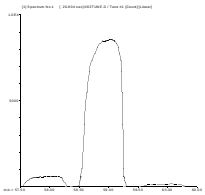
Data File: C:\ICPCHEM\1\DATA\09J02m00.B\063TUNE.D
Date Acquired: Oct 2 2009 11:15 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

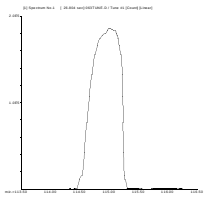
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	127209	131561	134514	136121	3.19	5.00	
59 Co	49314	50388	50912	51014	1.82	5.00	
115 In	1026415	1020463	1027151	1025718	0.50	5.00	
205 Tl	80499	80405	79566	78952	0.93	5.00	



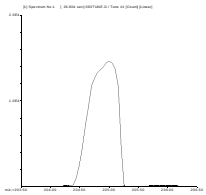
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Filtrate: EPA 6020

Inst : MET16 Reviewer : ---
Calnum : 899396748001 Date : 02-OCT-2009 12:45
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09j02m00004	899396748004		02-OCT-2009 12:55	S13065, S13058
L2	09j02m00005	899396748005		02-OCT-2009 13:06	S13066, S13058
L3	09j02m00006	899396748006		02-OCT-2009 13:16	S13067, S13058
L4	09j02m00007	899396748007		02-OCT-2009 13:27	S13068, S13058
L5	09j02m00008	899396748008		02-OCT-2009 13:37	S13063, S13058
L6	09j02m00009	899396748009		02-OCT-2009 13:48	S13064, S13058

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0093	0.0070	0.0063	0.0060	0.0059	0.0058	BLNK	-0.6288	171.330		0.0067	1.000	0.995	
Antimony	A	0.0066	0.0026	0.0025	0.0025	0.0025	0.0025	BLNK	-0.0138	398.007		0.0032	1.000	0.995	
Barium	A	0.0012	6.6E-4	6.1E-4	5.7E-4	5.6E-4	5.7E-4	BLNK	-0.0108	1763.03		6.9E-4	1.000	0.995	
Beryllium	A	0.0023	0.0020	0.0020	0.0021	0.0020	0.0020	BLNK	-0.0061	491.668		0.0021	1.000	0.995	
Cadmium	A	7.5E-4	6.7E-4	6.8E-4	6.7E-4	6.7E-4	6.6E-4	BLNK	-0.0048	1506.46		6.8E-4	1.000	0.995	
Calcium	A	8.5E-4	2.6E-4	2.1E-4	1.8E-4	1.8E-4	1.8E-4	BLNK	-9.0041	5655.56		3.1E-4	1.000	0.995	
Lead	A	0.0127	0.0074	0.0069	0.0064	0.0061	0.0062	BLNK	-0.0702	162.573		0.0076	1.000	0.995	
Magnesium	A	0.0088	0.0061	0.0060	0.0053	0.0051	0.0051	BLNK	-1.5064	197.393		0.0061	1.000	0.995	
Potassium	A	0.1125	0.0267	0.0161	0.0068	0.0058	0.0057	BLNK	-186.01	176.452		0.0289	1.000	0.995	
Silver	A	0.0040	0.0030	0.0029	0.0028	0.0027	0.0027	BLNK	-0.0102	365.526		0.0030	1.000	0.995	
Thallium	A	0.0096	0.0068	0.0066	0.0063	0.0065	0.0068	BLNK	-0.0259	148.122		0.0071	0.999	0.995	
Arsenic	E	0.0066	0.0044	0.0048	0.0045	0.0044	0.0045	BLNK	-0.0551	224.306		0.0049	1.000	0.995	
Chromium	E	0.0670	0.0320	0.0283	0.0248	0.0241	0.0240	BLNK	-0.1036	41.6200		0.0334	1.000	0.995	
Manganese	E	0.0311	0.0157	0.0136	0.0132	0.0127	0.0128	BLNK	-0.0304	78.4944		0.0165	1.000	0.995	
Nickel	E	0.0187	0.0111	0.0110	0.0104	0.0100	0.0098	BLNK	-0.0177	101.637		0.0118	1.000	0.995	
Sodium	E	0.1121	0.0269	0.0168	0.0076	0.0062	0.0061	BLNK	-170.44	165.136		0.0293	1.000	0.995	
Zinc	E	0.1762	0.0380	0.0209	0.0098	0.0085	0.0082	BLNK	-0.2543	121.156		0.0436	0.999	0.995	
Iron	H	0.0132	0.0081	0.0079	0.0075	0.0072	0.0071	BLNK	-1.9376	140.206		0.0085	1.000	0.995	
Selenium	H	0.0021	0.0010	0.0011	0.0011	0.0011	0.0010	BLNK	-0.0440	963.806		0.0012	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	**54**	50.00	18	100.0	7	1000	3	10000	0	20000	0
Antimony	A	0.100	**150**	0.500	2	1.000	0	10.00	-2	100.0	-1	200.0	0
Barium	A	0.100	**94**	0.500	14	1.000	7	10.00	1	100.0	-1	200.0	0
Beryllium	A	0.100	9	0.500	-1	1.000	-2	10.00	3	100.0	1	200.0	0
Cadmium	A	0.100	8	0.500	0	1.000	1	10.00	0	100.0	1	200.0	0
Calcium	A	10.00	**292**	50.00	**30**	100.0	11	1000	2	10000	2	20000	-1
Lead	A	0.100	**37**	0.500	7	1.000	6	10.00	3	100.0	0	200.0	0
Magnesium	A	10.00	**59**	50.00	18	100.0	16	1000	4	10000	1	20000	0
Potassium	A	10.00	**25**	50.00	-1	100.0	-2	1000	1	10000	1	20000	0
Silver	A	0.100	**38**	0.500	6	1.000	5	10.00	1	100.0	0	200.0	0
Thallium	A	0.050	-9	0.250	-9	0.500	-8	5.000	-6	50.00	-4	100.0	1
Arsenic	E	0.100	-8	0.500	-13	1.000	3	10.00	0	100.0	0	200.0	0
Chromium	E	0.100	**75**	0.500	13	1.000	8	10.00	2	100.0	0	200.0	0
Manganese	E	0.100	**113**	0.500	17	1.000	4	10.00	3	100.0	0	200.0	0
Nickel	E	0.100	**73**	0.500	10	1.000	10	10.00	6	100.0	1	200.0	0
Sodium	E	10.00	**47**	50.00	4	100.0	7	1000	9	10000	1	20000	0
Zinc	E	0.100	**1781**	0.500	**310**	1.000	**128**	10.00	16	100.0	2	200.0	-1
Iron	H	10.00	**65**	50.00	10	100.0	9	1000	6	10000	1	20000	0
Selenium	H	0.100	**55**	0.500	-10	1.000	3	10.00	3	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16
Calnum : 899396748001 Cal Date : 02-OCT-2009

ICV 899396748010 (09j02m00010 02-OCT-2009) stds: S13061, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	10580	ug/L	6	10	
Antimony	A	100.0	104.3	ug/L	4	10	
Barium	A	100.0	104.1	ug/L	4	10	
Beryllium	A	100.0	106.9	ug/L	7	10	
Cadmium	A	100.0	105.2	ug/L	5	10	
Calcium	A	10000	10500	ug/L	5	10	
Lead	A	100.0	102.9	ug/L	3	10	
Magnesium	A	10000	10410	ug/L	4	10	
Potassium	A	10000	10510	ug/L	5	10	
Silver	A	100.0	107.6	ug/L	8	10	
Thallium	A	50.00	50.13	ug/L	0	10	
Arsenic	E	100.0	105.6	ug/L	6	10	
Chromium	E	100.0	105.6	ug/L	6	10	
Manganese	E	100.0	103.4	ug/L	3	10	
Nickel	E	100.0	107.3	ug/L	7	10	
Sodium	E	10000	10560	ug/L	6	10	
Zinc	E	100.0	106.3	ug/L	6	10	
Iron	H	10000	10510	ug/L	5	10	
Selenium	H	100.0	104.5	ug/L	5	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748011 File : 09j02m00011 Time : 02-OCT-2009 14:08
Cal : 899396748001 Caldate : 02-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	ND	10.00	6.200	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.02510]	0.05000	0.01280	ug/L	!ib
Arsenic	E	[0.06470]	0.1000	0.03563	ug/L	!ib
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1548276	-4.57
Scandium	A	1172094	1122826	-4.20
Scandium	E	44815	42721	-4.67
Scandium	H	283259	272437	-3.82
Germanium	H	67917	66038	-2.77
Germanium	E	23474	22485	-4.21
Indium	A	1758598	1700812	-3.29
Bismuth	A	1924023	1901641	-1.16
Yttrium	A	1657531	1612110	-2.74
Terbium	A	2731184	2685003	-1.69

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748013 File : 09j02m00013 Time : 02-OCT-2009 14:29
Cal : 899396748001 Caldate : 02-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3847	0.1000	ug/L	!a+
Barium	A	1.597	0.1000	ug/L	!a+
Beryllium	A	[0.03390]	0.1000	ug/L	
Cadmium	A	3.055	0.1000	ug/L	!a+
Lead	A	1.585	0.1000	ug/L	!a+
Silver	A	0.2040	0.1000	ug/L	!a+
Thallium	A	0.1026	0.05000	ug/L	!a+
Arsenic	E	0.6513	0.1000	ug/L	!a+
Chromium	E	12.67	0.1000	ug/L	!a+
Manganese	E	7.504	0.1000	ug/L	!a+
Nickel	E	4.479	0.1000	ug/L	!a+
Zinc	E	8.958	0.1000	ug/L	!a+
Selenium	H	0.2437	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	120500	ug/L	121
Calcium	A	300000	349500	ug/L	117
Magnesium	A	100000	116800	ug/L	117
Molybdenum	A	2000	2424	ug/L	121
Potassium	A	100000	119100	ug/L	119
Sodium	E	250000	293200	ug/L	117
Iron	H	250000	282000	ug/L	113

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1368261	-15.67
Scandium	A	1172094	1063647	-9.25
Scandium	E	44815	43399	-3.16
Scandium	H	283259	287985	1.67
Germanium	H	67917	63293	-6.81
Germanium	E	23474	21452	-8.61
Indium	A	1758598	1410873	-19.77
Bismuth	A	1924023	1498230	-22.13
Yttrium	A	1657531	1468569	-11.40
Terbium	A	2731184	2440018	-10.66

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748014 File : 09j02m00014 Time : 02-OCT-2009 14:40
Cal : 899396748001 Caldate : 02-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	109700	ug/L	10		
Cadmium	A	100.0	110.4	ug/L	10	20	
Calcium	A	300000	322700	ug/L	8		
Magnesium	A	100000	106100	ug/L	6		
Potassium	A	100000	109600	ug/L	10		
Silver	A	50.00	54.31	ug/L	9	20	
Arsenic	E	100.0	117.0	ug/L	17	20	
Chromium	E	200.0	225.0	ug/L	13	20	
Manganese	E	200.0	228.0	ug/L	14	20	
Nickel	E	200.0	208.4	ug/L	4	20	
Sodium	E	250000	276200	ug/L	10		
Zinc	E	100.0	105.9	ug/L	6	20	
Iron	H	250000	268300	ug/L	7		
Selenium	H	100.0	112.4	ug/L	12	20	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	283259	285275	0.71
Scandium	A	1172094	1023231	-12.70
Scandium	E	44815	40418	-9.81
Germanium	H	67917	63608	-6.34
Germanium	E	23474	20348	-13.32
Indium	A	1758598	1390403	-20.94
Yttrium	A	1657531	1443156	-12.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748025 File : 09j02m00025 Time : 02-OCT-2009 16:39
Cal : 899396748001 Caldate : 02-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0067	0.0062	10000	10660	ug/L	7	10	
Antimony	A	0.0032	0.0026	100.0	104.6	ug/L	5	10	
Barium	A	6.9E-4	6.0E-4	100.0	106.5	ug/L	7	10	
Beryllium	A	0.0021	0.0022	100.0	106.2	ug/L	6	10	
Cadmium	A	6.8E-4	6.9E-4	100.0	104.3	ug/L	4	10	
Calcium	A	3.1E-4	1.9E-4	10000	10580	ug/L	6	10	
Lead	A	0.0076	0.0064	100.0	103.3	ug/L	3	10	
Magnesium	A	0.0061	0.0053	10000	10540	ug/L	5	10	
Potassium	A	0.0289	0.0061	10000	10610	ug/L	6	10	
Silver	A	0.0030	0.0030	100.0	108.5	ug/L	9	10	
Thallium	A	0.0071	0.0068	50.00	50.13	ug/L	0	10	
Arsenic	E	0.0049	0.0047	100.0	105.9	ug/L	6	10	
Chromium	E	0.0334	0.0252	100.0	105.0	ug/L	5	10	
Manganese	E	0.0165	0.0132	100.0	103.4	ug/L	3	10	
Nickel	E	0.0118	0.0104	100.0	105.3	ug/L	5	10	
Sodium	E	0.0293	0.0065	10000	10590	ug/L	6	10	
Zinc	E	0.0436	0.0088	100.0	106.9	ug/L	7	10	
Iron	H	0.0085	0.0074	10000	10380	ug/L	4	10	
Selenium	H	0.0012	0.0011	100.0	103.7	ug/L	4	10	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1534198	-5.44
Scandium	A	1172094	1137891	-2.92
Scandium	E	44815	42653	-4.82
Scandium	H	283259	284660	0.49
Germanium	H	67917	66260	-2.44
Germanium	E	23474	21899	-6.71
Indium	A	1758598	1561409	-11.21
Bismuth	A	1924023	1697013	-11.80
Yttrium	A	1657531	1546991	-6.67
Terbium	A	2731184	2492494	-8.74

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748026 File : 09j02m00026 Time : 02-OCT-2009 16:49
Cal : 899396748001 Caldate : 02-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	ND	10.00	6.200	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	[0.01330]	0.05000	0.01280	ug/L	!ib
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1572561	-3.08
Scandium	A	1172094	1148061	-2.05
Scandium	E	44815	42193	-5.85
Scandium	H	283259	276318	-2.45
Germanium	H	67917	66552	-2.01
Germanium	E	23474	21933	-6.56
Indium	A	1758598	1643311	-6.56
Bismuth	A	1924023	1792924	-6.81
Yttrium	A	1657531	1580764	-4.63
Terbium	A	2731184	2536726	-7.12

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748035 File : 09j02m00035 Time : 02-OCT-2009 18:20
Cal : 899396748001 Caldate : 02-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0067	0.0061	10000	10520	ug/L	5	10	
Antimony	A	0.0032	0.0026	100.0	103.3	ug/L	3	10	
Barium	A	6.9E-4	6.0E-4	100.0	106.5	ug/L	7	10	
Beryllium	A	0.0021	0.0021	100.0	105.3	ug/L	5	10	
Cadmium	A	6.8E-4	6.8E-4	100.0	103.0	ug/L	3	10	
Calcium	A	3.1E-4	1.8E-4	10000	10440	ug/L	4	10	
Lead	A	0.0076	0.0063	100.0	102.5	ug/L	3	10	
Magnesium	A	0.0061	0.0052	10000	10350	ug/L	4	10	
Potassium	A	0.0289	0.0060	10000	10490	ug/L	5	10	
Silver	A	0.0030	0.0029	100.0	107.5	ug/L	8	10	
Thallium	A	0.0071	0.0067	50.00	49.67	ug/L	-1	10	
Arsenic	E	0.0049	0.0048	100.0	107.0	ug/L	7	10	
Chromium	E	0.0334	0.0251	100.0	104.4	ug/L	4	10	
Manganese	E	0.0165	0.0132	100.0	103.2	ug/L	3	10	
Nickel	E	0.0118	0.0103	100.0	104.9	ug/L	5	10	
Sodium	E	0.0293	0.0065	10000	10520	ug/L	5	10	
Zinc	E	0.0436	0.0088	100.0	105.8	ug/L	6	10	
Iron	H	0.0085	0.0074	10000	10430	ug/L	4	10	
Selenium	H	0.0012	0.0011	100.0	102.4	ug/L	2	10	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1493242	-7.97
Scandium	A	1172094	1125754	-3.95
Scandium	E	44815	41927	-6.44
Scandium	H	283259	277471	-2.04
Germanium	H	67917	65710	-3.25
Germanium	E	23474	21583	-8.06
Indium	A	1758598	1564708	-11.03
Bismuth	A	1924023	1711124	-11.07
Yttrium	A	1657531	1546892	-6.67
Terbium	A	2731184	2509803	-8.11

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748036 File : 09j02m00036 Time : 02-OCT-2009 18:30
Cal : 899396748001 Caldate : 02-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	3.022	ug/L	
Antimony	A	ND	0.1000	0.05623	ug/L	
Barium	A	ND	0.1000	0.04661	ug/L	
Beryllium	A	ND	0.1000	0.03849	ug/L	
Cadmium	A	ND	0.1000	0.02757	ug/L	
Calcium	A	ND	10.00	5.347	ug/L	
Lead	A	ND	0.1000	0.04402	ug/L	
Magnesium	A	ND	10.00	3.033	ug/L	
Potassium	A	ND	10.00	6.200	ug/L	
Silver	A	ND	0.1000	0.02926	ug/L	
Thallium	A	ND	0.05000	0.01280	ug/L	
Arsenic	E	ND	0.1000	0.03563	ug/L	
Chromium	E	ND	0.1000	0.08000	ug/L	
Manganese	E	ND	0.1000	0.04043	ug/L	
Nickel	E	ND	0.1000	0.07446	ug/L	
Sodium	E	ND	10.00	5.161	ug/L	
Zinc	E	ND	0.1000	0.2752	ug/L	
Iron	H	ND	10.00	3.865	ug/L	
Selenium	H	ND	0.1000	0.04707	ug/L	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1518467	-6.41
Scandium	A	1172094	1115216	-4.85
Scandium	E	44815	41811	-6.70
Scandium	H	283259	272098	-3.94
Germanium	H	67917	65502	-3.56
Germanium	E	23474	21749	-7.35
Indium	A	1758598	1602478	-8.88
Bismuth	A	1924023	1761087	-8.47
Yttrium	A	1657531	1540241	-7.08
Terbium	A	2731184	2499374	-8.49

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748077 File : 09j02m00077 Time : 03-OCT-2009 01:37
Cal : 899396748001 Caldate : 02-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.3384	0.1000	ug/L	!a+
Barium	A	1.766	0.1000	ug/L	!a+
Beryllium	A	[0.02720]	0.1000	ug/L	
Cadmium	A	3.612	0.1000	ug/L	!a+
Lead	A	1.506	0.1000	ug/L	!a+
Silver	A	0.1914	0.1000	ug/L	!a+
Thallium	A	0.09230	0.05000	ug/L	!a+
Arsenic	E	0.5525	0.1000	ug/L	!a+
Chromium	E	12.49	0.1000	ug/L	!a+
Manganese	E	7.714	0.1000	ug/L	!a+
Nickel	E	4.310	0.1000	ug/L	!a+
Zinc	E	9.060	0.1000	ug/L	!a+
Selenium	H	0.2294	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	117900	ug/L	118
Calcium	A	300000	351400	ug/L	117
Magnesium	A	100000	112800	ug/L	113
Molybdenum	A	2000	2374	ug/L	119
Potassium	A	100000	120900	ug/L	121
Sodium	E	250000	282300	ug/L	113
Iron	H	250000	287400	ug/L	115

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1622503	1444182	-10.99
Scandium	A	1172094	1182830	0.92
Scandium	E	44815	48286	7.75
Scandium	H	283259	273246	-3.53
Germanium	H	67917	60355	-11.13
Germanium	E	23474	23380	-0.40
Indium	A	1758598	1514216	-13.90
Bismuth	A	1924023	1501437	-21.96
Yttrium	A	1657531	1614641	-2.59
Terbium	A	2731184	2511899	-8.03

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 899396748078 File : 09j02m00078 Time : 03-OCT-2009 01:47
Cal : 899396748001 Caldate : 02-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	110800	ug/L	11		
Cadmium	A	100.0	109.1	ug/L	9	20	
Calcium	A	300000	333800	ug/L	11		
Magnesium	A	100000	105900	ug/L	6		
Potassium	A	100000	114100	ug/L	14		
Silver	A	50.00	54.01	ug/L	8	20	
Arsenic	E	100.0	114.5	ug/L	15	20	
Chromium	E	200.0	212.0	ug/L	6	20	
Manganese	E	200.0	223.1	ug/L	12	20	
Nickel	E	200.0	192.3	ug/L	-4	20	
Sodium	E	250000	264700	ug/L	6		
Zinc	E	100.0	101.4	ug/L	1	20	
Iron	H	250000	272800	ug/L	9		
Selenium	H	100.0	110.6	ug/L	11	20	

ISTD (ICALBLK 09j02m00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	283259	271462	-4.16
Scandium	A	1172094	1128375	-3.73
Scandium	E	44815	46336	3.39
Germanium	H	67917	60992	-10.20
Germanium	E	23474	22453	-4.35
Indium	A	1758598	1488087	-15.38
Yttrium	A	1657531	1568017	-5.40

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019399708

Instrument : MET26 Begun : 10/04/09 13:48
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09j04n00001	TUN				10/04/09 13:48	1.0	1	
002	09j04n00002	X	RINSE			10/04/09 13:54	1.0	2	
003	09j04n00003	ICALBLK	CALBLANK			10/04/09 14:04	1.0	2	
004	09j04n00004	ICAL				10/04/09 14:13	1.0	3 2	
005	09j04n00005	ICAL				10/04/09 14:23	1.0	4 2	
006	09j04n00006	ICAL				10/04/09 14:33	1.0	5 2	
007	09j04n00007	ICAL				10/04/09 14:43	1.0	6 2	
008	09j04n00008	ICAL				10/04/09 14:53	1.0	7 2	
009	09j04n00009	ICAL				10/04/09 15:04	1.0	8 2	
010	09j04n00010	ICV				10/04/09 15:13	1.0	9 2	
011	09j04n00011	X				10/04/09 15:23	1.0	2	
012	09j04n00012	ICB				10/04/09 15:34	1.0	2	
013	09j04n00013	ICSA				10/04/09 15:41	1.0	10 2	7:CA=320000
014	09j04n00014	ICSAB				10/04/09 15:51	1.0	11 2	7:CA=290000
015	09j04n00015	X	RINSE			10/04/09 16:01	1.0	2	
016	09j04n00016	X	RINSE			10/04/09 16:11	1.0	2	
017	09j04n00017	BLANK	QC514833	Miscell.	155592	10/04/09 16:22	20.0	2	
018	09j04n00018	BS	QC514834	Miscell.	155592	10/04/09 16:32	20.0	2	
019	09j04n00019	BSD	QC514835	Miscell.	155592	10/04/09 16:42	20.0	2	
020	09j04n00020	MSS	215171-001	Miscell.	155592	10/04/09 16:52	20.0	2	
021	09j04n00021	MS	QC514836	Miscell.	155592	10/04/09 17:02	20.0	2	
022	09j04n00022	MSD	QC514837	Miscell.	155592	10/04/09 17:12	20.0	2	
023	09j04n00023	CCV				10/04/09 17:22	1.0	12 2	
024	09j04n00024	CCB				10/04/09 17:32	1.0	2	
025	09j04n00025	X				10/04/09 17:42	1.0	2	
026	09j04n00026	BLANK	QC514300	Filtrate	155465	10/04/09 17:52	5.0	2	
027	09j04n00027	BS	QC514301	Filtrate	155465	10/04/09 18:03	5.0	2	
028	09j04n00028	BSD	QC514302	Filtrate	155465	10/04/09 18:13	5.0	2	
029	09j04n00029	MSS	215216-001	Filtrate	155465	10/04/09 18:23	500.0	2	
030	09j04n00030	SER	QC514307	Filtrate	155465	10/04/09 18:33	2500	2	
031	09j04n00031	MS	QC514303	Filtrate	155465	10/04/09 18:43	500.0	2	
032	09j04n00032	MSD	QC514304	Filtrate	155465	10/04/09 18:53	500.0	2	
033	09j04n00033	PDS	QC514308	Filtrate	155465	10/04/09 19:03	500.0	13 14 2	
034	09j04n00034	MSS	215216-011	Filtrate	155465	10/04/09 19:13	500.0	2	
035	09j04n00035	MS	QC514305	Filtrate	155465	10/04/09 19:23	500.0	2	
036	09j04n00036	CCV				10/04/09 19:34	1.0	12 2	
037	09j04n00037	CCB				10/04/09 19:44	1.0	2	
038	09j04n00038	X				10/04/09 19:54	1.0	2	
039	09j04n00039	MSD	QC514306	Filtrate	155465	10/04/09 20:04	500.0	2	
040	09j04n00040	SAMPLE	215216-002	Filtrate	155465	10/04/09 20:14	500.0	2	
041	09j04n00041	SAMPLE	215216-003	Filtrate	155465	10/04/09 20:24	500.0	2	
042	09j04n00042	SAMPLE	215216-004	Filtrate	155465	10/04/09 20:34	500.0	2	
043	09j04n00043	SAMPLE	215216-005	Filtrate	155465	10/04/09 20:45	500.0	2	
044	09j04n00044	SAMPLE	215216-006	Filtrate	155465	10/04/09 20:55	500.0	2	
045	09j04n00045	SAMPLE	215216-007	Filtrate	155465	10/04/09 21:05	500.0	2	
046	09j04n00046	SAMPLE	215216-008	Filtrate	155465	10/04/09 21:15	500.0	2	
047	09j04n00047	SAMPLE	215216-009	Filtrate	155465	10/04/09 21:25	500.0	2	
048	09j04n00048	SAMPLE	215216-010	Filtrate	155465	10/04/09 21:35	500.0	2	
049	09j04n00049	CCV				10/04/09 21:46	1.0	12 2	
050	09j04n00050	X				10/04/09 21:56	1.0	12 2	
051	09j04n00051	CCB				10/04/09 22:05	1.0	2	
052	09j04n00052	X				10/04/09 22:16	1.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019399708

Instrument : MET26 Begun : 10/04/09 13:48
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09j04n00053	X				10/04/09 22:26	1.0	12 2	
054	09j04n00054	X				10/04/09 22:36	1.0	2	
055	09j04n00055	BLANK	QC514733	Water	155568	10/04/09 22:46	5.0	2	
056	09j04n00056	SAMPLE	215114-005	Water	155568	10/04/09 22:56	5.0	2	
057	09j04n00057	BS	QC514727	Water	155567	10/04/09 23:06	5.0	2	
058	09j04n00058	BSD	QC514728	Water	155567	10/04/09 23:16	5.0	2	
059	09j04n00059	MS	QC514729	Water	155567	10/04/09 23:26	5.0	2	1:NA=21000
060	09j04n00060	MSD	QC514730	Water	155567	10/04/09 23:36	5.0	2	1:NA=21000
061	09j04n00061	SAMPLE	215134-005	Filtrate	155515	10/04/09 23:46	10.0	2	1:NA=93000
062	09j04n00062	CCV				10/04/09 23:56	1.0	12 2	
063	09j04n00063	CCB				10/05/09 00:06	1.0	2	
064	09j04n00064	BLANK	QC514950	Soil	155618	10/05/09 00:17	25.0	2	
065	09j04n00065	TUN				10/05/09 00:28	1.0	1	
066	09j04n00066	X	RINSE			10/05/09 00:34	1.0	2	
067	09j04n00067	BS	QC514951	Soil	155618	10/05/09 00:44	25.0	2	
068	09j04n00068	BSD	QC514952	Soil	155618	10/05/09 00:55	25.0	2	
069	09j04n00069	MSS	215326-001	Soil	155618	10/05/09 01:05	25.0	2	2:FE=37000
070	09j04n00070	SER	QC514955	Soil	155618	10/05/09 01:15	125.0	2	
071	09j04n00071	MS	QC514953	Soil	155618	10/05/09 01:25	25.0	2	
072	09j04n00072	MSD	QC514954	Soil	155618	10/05/09 01:35	25.0	2	
073	09j04n00073	PDS	QC514956	Soil	155618	10/05/09 01:45	25.0	13 14 2	4:FE=45000
074	09j04n00074	CCV				10/05/09 01:55	1.0	12 2	
075	09j04n00075	CCB				10/05/09 02:05	1.0	2	
076	09j04n00076	SAMPLE	215303-018	Water	155566	10/05/09 02:15	5.0	2	
077	09j04n00077	SAMPLE	215072-005	Filtrate	155517	10/05/09 02:25	5.0	2	1:NA=40000
078	09j04n00078	ICSA				10/05/09 02:35	1.0	10 2	7:CA=310000
079	09j04n00079	ICSAB				10/05/09 02:46	1.0	11 2	8:CA=290000
080	09j04n00080	X	RINSE			10/05/09 02:56	1.0	2	
081	09j04n00081	X	RINSE			10/05/09 03:06	1.0	2	
082	09j04n00082	CCV				10/05/09 03:16	1.0	12 2	
083	09j04n00083	CCB				10/05/09 03:26	1.0	2	
084	09j04n00084	SER	QC514514	Filtrate	155517	10/05/09 03:36	25.0	2	
085	09j04n00085	PDS	QC514515	Filtrate	155517	10/05/09 03:46	5.0	13 14 2	
086	09j04n00086	X	215216-004	Filtrate	155465	10/05/09 03:57	10.0	2	
087	09j04n00087	CCV				10/05/09 04:07	1.0	12 2	
088	09j04n00088	X				10/05/09 04:17	1.0	2	
089	09j04n00089	CCB				10/05/09 04:27	1.0	2	
090	09j04n00090	ICSA				10/05/09 04:37	1.0	10 2	7:CA=310000
091	09j04n00091	ICSAB				10/05/09 04:47	1.0	11 2	8:CA=290000
092	09j04n00092	X	RINSE			10/05/09 04:58	1.0	2	
093	09j04n00093	X	RINSE			10/05/09 05:08	1.0	2	
094	09j04n00094	X	RINSE			10/05/09 05:18	1.0	2	
095	09j04n00095	X	RINSE			10/05/09 05:28	1.0	2	
096	09j04n00096	X	RINSE			10/05/09 05:38	1.0	2	

JYF 10/05/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 91.

Standards used: 1=S13057 2=S13058 3=S13065 4=S13066 5=S13067 6=S13068 7=S13063 8=S13064 9=S13061 10=S13059 11=S13060 12=S13062 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019399708

Date : 10/04/09 Reference : 09j04n00003
Sequence : MET26 09j04n00 Analyzed : 10/04/09 14:04

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	859062	3937570	76431	1119620	350515	61320	6593726	5346203	7263496	9133947
		LOWER LIMIT	257719	1181271	22929	335886	105155	18396	1978118	1603861	2179049	2740184
		UPPER LIMIT	1030874	4725084	91717	1343544	420618	73584	7912471	6415444	8716195	10960736
012	ICB		951344	3925559	78570	1125119	351423	62255	6591378	5450140	7238471	9077282
013	ICSA		575555	3412985	74032	1070446	322211	60887	5432863	4171818	6410782	8044384
014	ICSAB		603302	3568948	73313	1073564	323946	60287	5599748	4263574	6668255	8404355
017	BLANK	QC514833	665552	3641388	72626	1058629	340854	60362	6468936	5485817	7086671	9099626
018	BS	QC514834	672042	3610771	71419	1057391	331932	58951	6447174	5478806	7015091	9113603
019	BSD	QC514835	677287	3623945	72828	1058583	332650	59419	6373408	5366086	6968426	8978921
020	MSS	215171-001	694923	3541379	70501	1030718	339246	60493	6519230	5634548	7171348	9145339
021	MS	QC514836	708081	3530171	69686	1018942	333560	59999	6517328	5564968	7158633	9144587
022	MSD	QC514837	709641	3507698	70020	1033048	340037	60699	6475564	5538017	7162553	9205963
023	CCV		737077	3787281	75062	1100922	336512	60200	6396522	5281751	7082468	9124877
024	CCB		725771	3764785	75707	1105204	345001	61562	6544856	5443271	7180001	9164679
026	BLANK	QC514300	694766	3697328	74276	1071887	337099	60420	6552983	5527933	7123709	9202961
027	BS	QC514301	705777	3662315	73420	1082368	336300	59783	6433140	5516110	7046001	9082830
028	BSD	QC514302	702766	3714237	73488	1070663	334226	59555	6507137	5515430	7127744	9157958
029	MSS	215216-001	691304	3663850	73347	1057624	333298	59059	6540265	5505422	7070339	9176518
030	SER	QC514307	685723	3649296	73015	1062190	335015	59759	6571223	5548539	7076903	9227939
031	MS	QC514303	686800	3661555	73177	1071899	330767	59101	6469919	5508626	7078868	9117315
032	MSD	QC514304	691206	3675110	73239	1068262	332535	58763	6474871	5511180	7043608	9102747
033	PDS	QC514308	699010	3693193	72254	1081772	330946	58825	6363056	5330164	7059858	9140241
034	MSS	215216-011	708737	3726717	73500	1089639	331662	58736	6487571	5498571	7099169	9174908
035	MS	QC514305	715393	3670771	73140	1068774	331702	59424	6504099	5475071	7074445	9119075
036	CCV		724026	3791290	74202	1088332	333679	59868	6408372	5373190	7156941	9117197
037	CCB		731751	3770546	74501	1090442	338843	60678	6569043	5523699	7201438	9204742
039	MSD	QC514306	716639	3706280	73200	1069697	328735	59020	6550897	5516205	7063384	9157962
040	SAMPLE	215216-002	708809	3722371	72830	1086557	328811	58770	6473914	5509978	7113257	9139492
041	SAMPLE	215216-003	708519	3735491	73322	1067714	331704	59378	6544686	5509769	7105229	9203826
042	SAMPLE	215216-004	718923	3715638	73189	1078153	336759	60164	6509564	5540303	7128632	9120738
043	SAMPLE	215216-005	698410	3695020	72680	1056700	335616	59905	6560432	5553720	7073728	9197145
044	SAMPLE	215216-006	694384	3661847	71845	1061561	332643	59600	6546268	5577260	7065198	9221232
045	SAMPLE	215216-007	690607	3668873	72077	1057363	329198	58302	6531845	5487672	7068912	9153800
046	SAMPLE	215216-008	703587	3681089	71866	1061507	324865	58291	6507021	5477953	7057695	9117314
047	SAMPLE	215216-009	718081	3706286	72070	1062973	326988	58604	6514533	5490428	7117248	9174898
048	SAMPLE	215216-010	721988	3678232	72091	1057537	324604	58109	6487591	5498914	7068151	9178811
049	CCV		729824	3765098	72087	1077955	328063	58303	6410031	5371875	7087621	9173042
051	CCB		740564	3757488	72348	1076264	331531	58902	6556201	5509015	7160489	9232668
055	BLANK	QC514733	738735	3778694	72528	1079248	330820	58718	6587367	5541748	7187925	9142147
056	SAMPLE	215114-005	746788	3706726	72518	1067337	328208	58928	6550451	5520996	7080298	9187822
057	BS	QC514727	741756	3797120	72665	1075128	330542	58634	6538825	5545651	7177477	9209775
058	BSD	QC514728	732573	3644282	72090	1056522	323539	58501	6395031	5471224	7005537	8986497
059	MS	QC514729	722282	3820833	72905	1076094	329859	58906	6458969	5484189	7156313	9217353
060	MSD	QC514730	715576	3808192	73307	1076437	330843	59607	6496721	5420182	7189467	9223109
061	SAMPLE	215134-005	722208	3751648	69221	1057655	329086	56418	6381935	5209576	7032427	8976409
062	CCV		736308	3767759	71373	1063971	323446	57746	6403063	5320147	7078481	9129945
063	CCB		737185	3733595	71979	1059771	326802	58399	6547827	5502193	7129216	9187691
064	BLANK	QC514950	706643	3676335	69626	1043442	324676	57403	6528318	5494414	7015021	9204997
067	BS	QC514951	694701	3632588	68341	1021734	312972	55849	6480062	5563850	7005718	9204189
068	BSD	QC514952	697134	3625860	68565	1023313	313181	56224	6485941	5582431	7038629	9144692
069	MSS	215326-001	682829	3919084	74400	1116803	315320	56106	6360578	5429208	7693384	9153410

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019399708

Date : 10/04/09
Sequence : MET26 09j04n00

Reference : 09j04n00003
Analyzed : 10/04/09 14:04

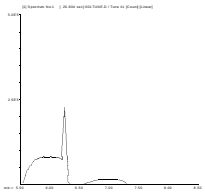
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
070	SER	QC514955	726932	3769992	71373	1060938	320041	57087	6471436	5534399	7201708	9213263
071	MS	QC514953	688231	3882214	73381	1095843	314143	56588	6326778	5379711	7516528	9119701
072	MSD	QC514954	685120	3876645	70700	1112284	317454	54848	6322848	5401320	7596659	9090839
073	PDS	QC514956	684650	3947337	74208	1124508	315457	56584	6246081	5218012	7706514	9066133
074	CCV		742058	3795291	69741	1053368	318704	56509	6381344	5325383	7073642	9136688
075	CCB		759489	3797495	71602	1050502	325332	58115	6526003	5468254	7166178	9093330
076	SAMPLE	215303-018	704434	3739365	69772	1052201	325342	57797	6559101	5478999	7095888	9175737
077	SAMPLE	215072-005	667901	3603840	67782	1013907	318201	56848	6354828	5359064	6987574	9099088
078	ICSA		532392	3409204	66466	991902	291441	55435	5462235	4231626	6456350	8221590
079	ICSAB		550774	3482299	66874	998912	297154	55594	5502910	4228162	6507750	8254955
082	CCV		660459	3635470	67990	1032313	313282	56357	6237232	5210465	6925499	8943253
083	CCB		640741	3646635	67303	1015086	318397	56677	6492792	5428378	7062750	9169394
084	SER	QC514514	614273	3545968	65483	991925	313239	55688	6545877	5555414	7052374	9264334
085	PDS	QC514515	638082	3554772	65477	995782	307357	54796	6472171	5523825	6965776	9082120
087	CCV		667526	3635224	66333	1013618	310369	54825	6359391	5321428	7017868	9138618
089	CCB		644755	3617743	67021	958376	303558	56061	6582950	5555794	7064165	9237810
090	ICSA		513934	3407811	64967	958508	286729	55207	5449923	4255605	6449388	8207543
091	ICSAB		570414	3565637	67092	1005864	296153	55495	5541431	4253297	6654652	8277581

MET26 QC Tune Report

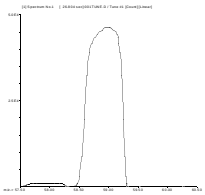
Data File: C:\ICPCHEM\1\DATA\09J04n00.B\001TUNE.D
Date Acquired: Oct 4 2009 01:48 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

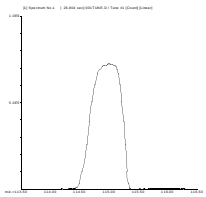
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	88040	86368	86234	84844	1.12	5.00	
59 Co	284234	282209	283252	281877	0.45	5.00	
115 In	4175153	4167457	4147149	4151522	1.35	5.00	
205 Tl	270280	267431	267234	266016	0.18	5.00	



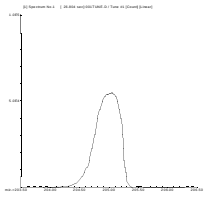
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



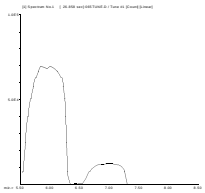
205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

MET26 QC Tune Report

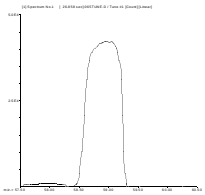
Data File: C:\ICPCHEM\1\DATA\09J04n00.B\065TUNE.D
Date Acquired: Oct 5 2009 12:28 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

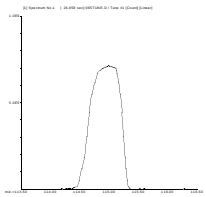
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	74909	74123	73641	72840	1.25	5.00	
59 Co	261170	257007	259049	256825	0.81	5.00	
115 In	4057344	4079963	4091418	4110507	0.76	5.00	
205 Tl	247567	246847	250709	250346	0.81	5.00	



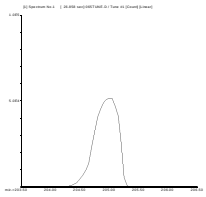
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Filtrate: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019399708001 Date : 04-OCT-2009 14:04
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09j04n00004	1019399708004		04-OCT-2009 14:13	S13065, S13058
L2	09j04n00005	1019399708005		04-OCT-2009 14:23	S13066, S13058
L3	09j04n00006	1019399708006		04-OCT-2009 14:33	S13067, S13058
L4	09j04n00007	1019399708007		04-OCT-2009 14:43	S13068, S13058
L5	09j04n00008	1019399708008		04-OCT-2009 14:53	S13063, S13058
L6	09j04n00009	1019399708009		04-OCT-2009 15:04	S13064, S13058

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0047	0.0035	0.0034	0.0032	0.0032	0.0032	BLNK	-9.4262	314.399		0.0035	1.000	0.995	
Antimony	A	0.0070	0.0028	0.0028	0.0027	0.0028	0.0028	BLNK	-0.0064	353.064		0.0035	1.000	0.995	
Barium	A	0.0017	7.9E-4	7.8E-4	6.9E-4	6.9E-4	7.3E-4	BLNK	-0.0326	1394.02		8.9E-4	0.999	0.995	
Beryllium	A	0.0033	0.0029	0.0030	0.0030	0.0030	0.0029	BLNK	-0.0062	340.770		0.0030	1.000	0.995	
Cadmium	A	9.4E-4	7.2E-4	7.3E-4	7.1E-4	6.9E-4	7.3E-4	BLNK	-0.0086	1377.32		7.6E-4	0.999	0.995	
Calcium	A	7.5E-4	2.9E-4	2.3E-4	1.9E-4	1.8E-4	1.7E-4	BLNK	-35.682	5739.48		3.0E-4	1.000	0.995	
Lead	A	0.0155	0.0073	0.0065	0.0056	0.0056	0.0054	BLNK	-0.1678	183.626		0.0077	1.000	0.995	
Magnesium	A	0.0035	0.0027	0.0025	0.0024	0.0024	0.0024	BLNK	-0.5828	421.392		0.0026	1.000	0.995	
Potassium	A	0.0512	0.0140	0.0095	0.0054	0.0050	0.0049	BLNK	-92.629	204.837		0.0150	1.000	0.995	
Silver	A	0.0048	0.0035	0.0034	0.0033	0.0034	0.0033	BLNK	-0.0159	300.085		0.0036	1.000	0.995	
Thallium	A	0.0106	0.0070	0.0068	0.0066	0.0072	0.0071	BLNK	-0.0240	140.795		0.0075	1.000	0.995	
Arsenic	E	0.0075	0.0059	0.0055	0.0055	0.0053	0.0054	BLNK	-0.0331	186.357		0.0058	1.000	0.995	
Chromium	E	0.1399	0.0550	0.0468	0.0376	0.0363	0.0359	BLNK	-0.2031	27.8287		0.0586	1.000	0.995	
Manganese	E	0.0348	0.0184	0.0180	0.0165	0.0160	0.0158	BLNK	-0.0199	63.2455		0.0199	1.000	0.995	
Nickel	E	0.0381	0.0224	0.0208	0.0193	0.0187	0.0180	BLNK	-0.0249	55.0830		0.0229	1.000	0.995	
Sodium	E	0.0640	0.0154	0.0093	0.0038	0.0031	0.0030	BLNK	-203.13	338.887		0.0164	1.000	0.995	
Zinc	E	0.1249	0.0339	0.0218	0.0101	0.0088	0.0086	BLNK	-0.2012	116.064		0.0347	1.000	0.995	
Iron	H	0.0137	0.0091	0.0091	0.0086	0.0084	0.0083	BLNK	-0.8187	120.151		0.0095	1.000	0.995	
Selenium	H	0.0013	0.0011	0.0011	0.0011	0.0010	0.0010	BLNK	-0.0192	975.362		0.0011	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	**-47**	50.00	-10	100.0	-3	1000	0	10000	1	20000	0
Antimony	A	0.100	**140**	0.500	-2	1.000	-2	10.00	-5	100.0	0	200.0	0
Barium	A	0.100	**98**	0.500	4	1.000	5	10.00	-4	100.0	-4	200.0	1
Beryllium	A	0.100	8	0.500	-2	1.000	1	10.00	2	100.0	1	200.0	0
Cadmium	A	0.100	**21**	0.500	-2	1.000	0	10.00	-3	100.0	-5	200.0	1
Calcium	A	10.00	**-26**	50.00	-7	100.0	-4	1000	6	10000	0	20000	0
Lead	A	0.100	17	0.500	1	1.000	2	10.00	1	100.0	2	200.0	0
Magnesium	A	10.00	**41**	50.00	15	100.0	5	1000	1	10000	0	20000	0
Potassium	A	10.00	**22**	50.00	2	100.0	1	1000	1	10000	1	20000	0
Silver	A	0.100	**27**	0.500	1	1.000	1	10.00	-1	100.0	1	200.0	0
Thallium	A	0.050	1	0.250	-11	0.500	-9	5.000	-7	50.00	1	100.0	0
Arsenic	E	0.100	6	0.500	3	1.000	0	10.00	2	100.0	-1	200.0	0
Chromium	E	0.100	**86**	0.500	12	1.000	10	10.00	3	100.0	1	200.0	0
Manganese	E	0.100	**100**	0.500	12	1.000	12	10.00	4	100.0	1	200.0	0
Nickel	E	0.100	**85**	0.500	18	1.000	12	10.00	6	100.0	3	200.0	-1
Sodium	E	10.00	**38**	50.00	15	100.0	11	1000	8	10000	2	20000	-1
Zinc	E	0.100	**1148**	0.500	**253**	1.000	**133**	10.00	15	100.0	2	200.0	0
Iron	H	10.00	**57**	50.00	8	100.0	8	1000	3	10000	1	20000	0
Selenium	H	0.100	5	0.500	0	1.000	10	10.00	3	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26
Calnum : 1019399708001 Cal Date : 04-OCT-2009

ICV 1019399708010 (09j04n00010 04-OCT-2009) stds: S13061, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	9786	ug/L	-2	10	
Antimony	A	100.0	97.72	ug/L	-2	10	
Barium	A	100.0	91.38	ug/L	-9	10	
Beryllium	A	100.0	97.94	ug/L	-2	10	
Cadmium	A	100.0	91.81	ug/L	-8	10	
Calcium	A	10000	9573	ug/L	-4	10	
Lead	A	100.0	97.11	ug/L	-3	10	
Magnesium	A	10000	9659	ug/L	-3	10	
Potassium	A	10000	9809	ug/L	-2	10	
Silver	A	100.0	98.98	ug/L	-1	10	
Thallium	A	50.00	49.14	ug/L	-2	10	
Arsenic	E	100.0	97.83	ug/L	-2	10	
Chromium	E	100.0	96.98	ug/L	-3	10	
Manganese	E	100.0	95.73	ug/L	-4	10	
Nickel	E	100.0	97.43	ug/L	-3	10	
Sodium	E	10000	9776	ug/L	-2	10	
Zinc	E	100.0	98.13	ug/L	-2	10	
Iron	H	10000	9643	ug/L	-4	10	
Selenium	H	100.0	96.00	ug/L	-4	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708012 File : 09j04n00012 Time : 04-OCT-2009 15:34
Cal : 1019399708001 Caldate : 04-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	951344	10.74
Scandium	A	3937570	3925559	-0.31
Scandium	E	76431	78570	2.80
Scandium	H	1119620	1125119	0.49
Germanium	H	350515	351423	0.26
Germanium	E	61320	62255	1.52
Indium	A	6593726	6591378	-0.04
Bismuth	A	5346203	5450140	1.94
Yttrium	A	7263496	7238471	-0.34
Terbium	A	9133947	9077282	-0.62

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708078 File : 09j04n00078 Time : 05-OCT-2009 02:35
Cal : 1019399708001 Caldate : 04-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2729	0.1000	ug/L	!a+
Barium	A	1.179	0.1000	ug/L	!a+
Beryllium	A	[0.03290]	0.1000	ug/L	
Cadmium	A	2.507	0.1000	ug/L	!a+
Lead	A	1.218	0.1000	ug/L	!a+
Silver	A	0.1600	0.1000	ug/L	!a+
Thallium	A	0.07810	0.05000	ug/L	!a+
Arsenic	E	0.3173	0.1000	ug/L	!a+
Chromium	E	1.125	0.1000	ug/L	!a+
Manganese	E	6.658	0.1000	ug/L	!a+
Nickel	E	3.922	0.1000	ug/L	!a+
Zinc	E	6.547	0.1000	ug/L	!a+
Selenium	H	0.2107	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99310	ug/L	99
Calcium	A	300000	307500	ug/L	103
Magnesium	A	100000	93010	ug/L	93
Molybdenum	A	2000	2053	ug/L	103
Potassium	A	100000	102900	ug/L	103
Sodium	E	250000	241000	ug/L	96
Iron	H	250000	251500	ug/L	101

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	532392	-38.03
Scandium	A	3937570	3409204	-13.42
Scandium	E	76431	66466	-13.04
Scandium	H	1119620	991902	-11.41
Germanium	H	350515	291441	-16.85
Germanium	E	61320	55435	-9.60
Indium	A	6593726	5462235	-17.16
Bismuth	A	5346203	4231626	-20.85
Yttrium	A	7263496	6456350	-11.11
Terbium	A	9133947	8221590	-9.99

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708079 File : 09j04n00079 Time : 05-OCT-2009 02:46
Cal : 1019399708001 Caldate : 04-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	92430	ug/L	-8		
Cadmium	A	100.0	91.44	ug/L	-9	20	
Calcium	A	300000	289000	ug/L	-4		
Magnesium	A	100000	87610	ug/L	-12		
Potassium	A	100000	95980	ug/L	-4		
Silver	A	50.00	49.69	ug/L	-1	20	
Arsenic	E	100.0	98.23	ug/L	-2	20	
Chromium	E	200.0	197.6	ug/L	-1	20	
Manganese	E	200.0	198.0	ug/L	-1	20	
Nickel	E	200.0	186.2	ug/L	-7	20	
Sodium	E	250000	231100	ug/L	-8		
Zinc	E	100.0	88.18	ug/L	-12	20	
Iron	H	250000	238800	ug/L	-4		
Selenium	H	100.0	99.59	ug/L	0	20	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1119620	998912	-10.78
Scandium	A	3937570	3482299	-11.56
Scandium	E	76431	66874	-12.50
Germanium	H	350515	297154	-15.22
Germanium	E	61320	55594	-9.34
Indium	A	6593726	5502910	-16.54
Yttrium	A	7263496	6507750	-10.40

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708082 File : 09j04n00082 Time : 05-OCT-2009 03:16
Cal : 1019399708001 Caldate : 04-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0035	0.0030	10000	9575	ug/L	-4	10	
Antimony	A	0.0035	0.0028	100.0	100.4	ug/L	0	10	
Barium	A	8.9E-4	6.5E-4	100.0	90.96	ug/L	-9	10	
Beryllium	A	0.0030	0.0031	100.0	104.5	ug/L	5	10	
Cadmium	A	7.6E-4	6.5E-4	100.0	89.86	ug/L	-10	10	
Calcium	A	3.0E-4	1.7E-4	10000	9721	ug/L	-3	10	
Lead	A	0.0077	0.0055	100.0	100.1	ug/L	0	10	
Magnesium	A	0.0026	0.0022	10000	9303	ug/L	-7	10	
Potassium	A	0.0150	0.0049	10000	9965	ug/L	0	10	
Silver	A	0.0036	0.0033	100.0	99.17	ug/L	-1	10	
Thallium	A	0.0075	0.0071	50.00	50.07	ug/L	0	10	
Arsenic	E	0.0058	0.0053	100.0	97.87	ug/L	-2	10	
Chromium	E	0.0586	0.0359	100.0	99.60	ug/L	0	10	
Manganese	E	0.0199	0.0153	100.0	97.06	ug/L	-3	10	
Nickel	E	0.0229	0.0185	100.0	102.1	ug/L	2	10	
Sodium	E	0.0164	0.0029	10000	9608	ug/L	-4	10	
Zinc	E	0.0347	0.0084	100.0	97.30	ug/L	-3	10	
Iron	H	0.0095	0.0083	10000	9969	ug/L	0	10	
Selenium	H	0.0011	0.0010	100.0	99.39	ug/L	-1	10	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	660459	-23.12
Scandium	A	3937570	3635470	-7.67
Scandium	E	76431	67990	-11.04
Scandium	H	1119620	1032313	-7.80
Germanium	H	350515	313282	-10.62
Germanium	E	61320	56357	-8.09
Indium	A	6593726	6237232	-5.41
Bismuth	A	5346203	5210465	-2.54
Yttrium	A	7263496	6925499	-4.65
Terbium	A	9133947	8943253	-2.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708083 File : 09j04n00083 Time : 05-OCT-2009 03:26
Cal : 1019399708001 Caldate : 04-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.01360]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	[2.885]	10.00	0.8425	ug/L	!ib
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	640741	-25.41
Scandium	A	3937570	3646635	-7.39
Scandium	E	76431	67303	-11.94
Scandium	H	1119620	1015086	-9.34
Germanium	H	350515	318397	-9.16
Germanium	E	61320	56677	-7.57
Indium	A	6593726	6492792	-1.53
Bismuth	A	5346203	5428378	1.54
Yttrium	A	7263496	7062750	-2.76
Terbium	A	9133947	9169394	0.39

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708087 File : 09j04n00087 Time : 05-OCT-2009 04:07
Cal : 1019399708001 Caldate : 04-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0035	0.0030	10000	9482	ug/L	-5	10	
Antimony	A	0.0035	0.0028	100.0	98.23	ug/L	-2	10	
Barium	A	8.9E-4	6.4E-4	100.0	88.87	ug/L	**-11**	10	c- ***
Beryllium	A	0.0030	0.0031	100.0	104.1	ug/L	4	10	
Cadmium	A	7.6E-4	6.4E-4	100.0	87.92	ug/L	**-12**	10	c- ***
Calcium	A	3.0E-4	1.7E-4	10000	9564	ug/L	-4	10	
Lead	A	0.0077	0.0054	100.0	98.84	ug/L	-1	10	
Magnesium	A	0.0026	0.0022	10000	9220	ug/L	-8	10	
Potassium	A	0.0150	0.0048	10000	9769	ug/L	-2	10	
Silver	A	0.0036	0.0032	100.0	97.44	ug/L	-3	10	
Thallium	A	0.0075	0.0070	50.00	49.37	ug/L	-1	10	
Arsenic	E	0.0058	0.0053	100.0	98.31	ug/L	-2	10	
Chromium	E	0.0586	0.0365	100.0	101.3	ug/L	1	10	
Manganese	E	0.0199	0.0155	100.0	98.02	ug/L	-2	10	
Nickel	E	0.0229	0.0187	100.0	103.1	ug/L	3	10	
Sodium	E	0.0164	0.0030	10000	9933	ug/L	-1	10	
Zinc	E	0.0347	0.0085	100.0	98.54	ug/L	-1	10	
Iron	H	0.0095	0.0082	10000	9855	ug/L	-1	10	
Selenium	H	0.0011	0.0010	100.0	98.80	ug/L	-1	10	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	667526	-22.30
Scandium	A	3937570	3635224	-7.68
Scandium	E	76431	66333	-13.21
Scandium	H	1119620	1013618	-9.47
Germanium	H	350515	310369	-11.45
Germanium	E	61320	54825	-10.59
Indium	A	6593726	6359391	-3.55
Bismuth	A	5346203	5321428	-0.46
Yttrium	A	7263496	7017868	-3.38
Terbium	A	9133947	9138618	0.05

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708089 File : 09j04n00089 Time : 05-OCT-2009 04:27
Cal : 1019399708001 Caldate : 04-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	ND	0.05000	0.01103	ug/L	
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	644755	-24.95
Scandium	A	3937570	3617743	-8.12
Scandium	E	76431	67021	-12.31
Scandium	H	1119620	958376	-14.40
Germanium	H	350515	303558	-13.40
Germanium	E	61320	56061	-8.58
Indium	A	6593726	6582950	-0.16
Bismuth	A	5346203	5555794	3.92
Yttrium	A	7263496	7064165	-2.74
Terbium	A	9133947	9237810	1.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708090 File : 09j04n00090 Time : 05-OCT-2009 04:37
Cal : 1019399708001 Caldate : 04-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2797	0.1000	ug/L	!a+
Barium	A	1.181	0.1000	ug/L	!a+
Beryllium	A	[0.03800]	0.1000	ug/L	
Cadmium	A	2.505	0.1000	ug/L	!a+
Lead	A	1.220	0.1000	ug/L	!a+
Silver	A	0.1546	0.1000	ug/L	!a+
Thallium	A	0.07660	0.05000	ug/L	!a+
Arsenic	E	0.2925	0.1000	ug/L	!a+
Chromium	E	1.142	0.1000	ug/L	!a+
Manganese	E	6.518	0.1000	ug/L	!a+
Nickel	E	3.894	0.1000	ug/L	!a+
Zinc	E	6.456	0.1000	ug/L	!a+
Selenium	H	0.1917	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98310	ug/L	98
Calcium	A	300000	309400	ug/L	103
Magnesium	A	100000	93760	ug/L	94
Molybdenum	A	2000	2037	ug/L	102
Potassium	A	100000	104200	ug/L	104
Sodium	E	250000	240700	ug/L	96
Iron	H	250000	256400	ug/L	103

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	859062	513934	-40.17
Scandium	A	3937570	3407811	-13.45
Scandium	E	76431	64967	-15.00
Scandium	H	1119620	958508	-14.39
Germanium	H	350515	286729	-18.20
Germanium	E	61320	55207	-9.97
Indium	A	6593726	5449923	-17.35
Bismuth	A	5346203	4255605	-20.40
Yttrium	A	7263496	6449388	-11.21
Terbium	A	9133947	8207543	-10.14

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019399708091 File : 09j04n00091 Time : 05-OCT-2009 04:47
Cal : 1019399708001 Caldate : 04-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94120	ug/L	-6		
Cadmium	A	100.0	90.94	ug/L	-9	20	
Calcium	A	300000	288500	ug/L	-4		
Magnesium	A	100000	88620	ug/L	-11		
Potassium	A	100000	97340	ug/L	-3		
Silver	A	50.00	49.81	ug/L	0	20	
Arsenic	E	100.0	98.21	ug/L	-2	20	
Chromium	E	200.0	198.4	ug/L	-1	20	
Manganese	E	200.0	198.0	ug/L	-1	20	
Nickel	E	200.0	186.0	ug/L	-7	20	
Sodium	E	250000	230700	ug/L	-8		
Zinc	E	100.0	88.21	ug/L	-12	20	
Iron	H	250000	238900	ug/L	-4		
Selenium	H	100.0	99.97	ug/L	0	20	

ISTD (ICALBLK 09j04n00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1119620	1005864	-10.16
Scandium	A	3937570	3565637	-9.45
Scandium	E	76431	67092	-12.22
Germanium	H	350515	296153	-15.51
Germanium	E	61320	55495	-9.50
Indium	A	6593726	5541431	-15.96
Yttrium	A	7263496	6654652	-8.38

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019400956

Instrument : MET26 Begun : 10/05/09 10:36
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	09j05k00001	TUN				10/05/09 10:36	1.0	1	
002	09j05k00002	X	RINSE			10/05/09 10:43	1.0	2	
003	09j05k00003	ICALBLK	CALBLANK			10/05/09 10:53	1.0	2	
004	09j05k00004	ICAL				10/05/09 11:03	1.0	3 2	
005	09j05k00005	ICAL				10/05/09 11:13	1.0	4 2	
006	09j05k00006	ICAL				10/05/09 11:23	1.0	5 2	
007	09j05k00007	ICAL				10/05/09 11:33	1.0	6 2	
008	09j05k00008	ICAL				10/05/09 11:44	1.0	7 2	
009	09j05k00009	ICAL				10/05/09 11:54	1.0	8 2	
010	09j05k00010	ICV				10/05/09 12:03	1.0	9 2	
011	09j05k00011	ICB				10/05/09 12:13	1.0	2	
012	09j05k00012	X				10/05/09 12:23	1.0	2	
013	09j05k00013	X				10/05/09 12:32	1.0	2	
014	09j05k00014	ICSA				10/05/09 12:40	1.0	10 2	6:CA=310000
015	09j05k00015	ICSAB				10/05/09 12:50	1.0	11 2	7:CA=290000
016	09j05k00016	X	RINSE			10/05/09 13:01	1.0	2	
017	09j05k00017	X	RINSE			10/05/09 13:11	1.0	2	
018	09j05k00018	BLANK	QC514509	Filtrate	155517	10/05/09 13:21	5.0	2	
019	09j05k00019	BS	QC514727	Water	155567	10/05/09 13:31	5.0	2	
020	09j05k00020	BSD	QC514728	Water	155567	10/05/09 13:41	5.0	2	
021	09j05k00021	MS	QC514729	Water	155567	10/05/09 13:51	5.0	2	1:NA=21000
022	09j05k00022	MSD	QC514730	Water	155567	10/05/09 14:01	5.0	2	1:NA=21000
023	09j05k00023	CCV				10/05/09 14:11	1.0	12 2	
024	09j05k00024	CCB				10/05/09 14:21	1.0	2	
025	09j05k00025	ICSA				10/05/09 14:31	1.0	10 2	7:CA=320000
026	09j05k00026	ICSAB				10/05/09 14:42	1.0	11 2	7:CA=300000
027	09j05k00027	X	RINSE			10/05/09 14:52	1.0	2	
028	09j05k00028	X	RINSE			10/05/09 15:02	1.0	2	
029	09j05k00029	BLANK	QC514950	Soil	155618	10/05/09 15:13	25.0	2	
030	09j05k00030	BS	QC514951	Soil	155618	10/05/09 15:23	25.0	2	
031	09j05k00031	BSD	QC514952	Soil	155618	10/05/09 15:33	25.0	2	
032	09j05k00032	MSS	215326-001	Soil	155618	10/05/09 15:43	25.0	2	2:FE=37000
033	09j05k00033	SER	QC514955	Soil	155618	10/05/09 15:53	125.0	2	
034	09j05k00034	MS	QC514953	Soil	155618	10/05/09 16:03	25.0	2	2:FE=35000
035	09j05k00035	MSD	QC514954	Soil	155618	10/05/09 16:13	25.0	2	2:FE=31000
036	09j05k00036	PDS	QC514956	Soil	155618	10/05/09 16:23	25.0	13 14 2	3:FE=44000
037	09j05k00037	CCV				10/05/09 16:33	1.0	12 2	
038	09j05k00038	CCB				10/05/09 16:43	1.0	2	
039	09j05k00039	MSS	215326-001	Soil	155618	10/05/09 16:53	250.0	2	
040	09j05k00040	SER	QC514955	Soil	155618	10/05/09 17:03	1250	2	
041	09j05k00041	PDS	QC514956	Soil	155618	10/05/09 17:14	250.0	13 14 2	
042	09j05k00042	CCV				10/05/09 17:24	1.0	12 2	
043	09j05k00043	CCB				10/05/09 17:33	1.0	2	
044	09j05k00044	BLANK	QC515174	Water	155675	10/05/09 17:44	1.0	2	
045	09j05k00045	LOQ	214798-001	Water	155675	10/05/09 17:54	1.0	2	
046	09j05k00046	MDLCHECK	211067-008	Water	155197	10/05/09 18:04	1.0	2	
047	09j05k00047	MDLCHECK	211067-016	Water	155197	10/05/09 18:14	1.0	2	
048	09j05k00048	CCV				10/05/09 18:24	1.0	12 2	
049	09j05k00049	CCB				10/05/09 18:34	1.0	2	
050	09j05k00050	BLANK	QC513688	Water	155320	10/05/09 18:44	5.0	2	
051	09j05k00051	BS	QC513689	Water	155320	10/05/09 18:55	5.0	2	
052	09j05k00052	BSD	QC513690	Water	155320	10/05/09 19:05	5.0	2	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1019400956

Instrument : MET26 Begun : 10/05/09 10:36
Method : EPA 6020 SOP Version : icpms_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	09j05k00053	MSS	215118-001	Water	155320	10/05/09 19:15	5.0	2	
054	09j05k00054	MS	QC513691	Water	155320	10/05/09 19:25	5.0	2	
055	09j05k00055	MSD	QC513692	Water	155320	10/05/09 19:35	5.0	2	
056	09j05k00056	SAMPLE	215118-002	Water	155320	10/05/09 19:45	5.0	2	
057	09j05k00057	CCV				10/05/09 19:55	1.0	12 2	
058	09j05k00058	CCB				10/05/09 20:05	1.0	2	
059	09j05k00059	BLANK	QC515081	Filtrate	155649	10/05/09 20:15	5.0	2	
060	09j05k00060	BS	QC515082	Filtrate	155649	10/05/09 20:25	5.0	2	
061	09j05k00061	BSD	QC515083	Filtrate	155649	10/05/09 20:35	5.0	2	
062	09j05k00062	MSS	215322-001	Filtrate	155649	10/05/09 20:45	5.0	2	2:NA=62000
063	09j05k00063	SER	QC515086	Filtrate	155649	10/05/09 20:55	25.0	2	
064	09j05k00064	MS	QC515084	Filtrate	155649	10/05/09 21:06	5.0	2	
065	09j05k00065	TUN				10/05/09 21:16	1.0	1	
066	09j05k00066	X	RINSE			10/05/09 21:23	1.0	2	
067	09j05k00067	MSD	QC515085	Filtrate	155649	10/05/09 21:33	5.0	2	
068	09j05k00068	PDS	QC515087	Filtrate	155649	10/05/09 21:43	5.0	13 14 2	
069	09j05k00069	SAMPLE	215322-002	Filtrate	155649	10/05/09 21:53	5.0	2	3:NA=55000
070	09j05k00070	SAMPLE	215322-003	Filtrate	155649	10/05/09 22:03	5.0	2	3:NA=59000
071	09j05k00071	CCV				10/05/09 22:14	1.0	12 2	
072	09j05k00072	CCB				10/05/09 22:24	1.0	2	
073	09j05k00073	SAMPLE	215322-004	Filtrate	155649	10/05/09 22:34	5.0	2	2:NA=34000
074	09j05k00074	CCV				10/05/09 22:44	1.0	12 2	
075	09j05k00075	CCB				10/05/09 22:54	1.0	2	
076	09j05k00076	ICSA				10/05/09 23:04	1.0	10 2	7:CA=310000
077	09j05k00077	ICSAB				10/05/09 23:14	1.0	11 2	7:CA=300000
078	09j05k00078	X	RINSE			10/05/09 23:25	1.0	2	
079	09j05k00079	X	RINSE			10/05/09 23:35	1.0	2	
080	09j05k00080	X	RINSE			10/05/09 23:45	1.0	2	
081	09j05k00081	X	RINSE			10/05/09 23:55	1.0	2	
082	09j05k00082	X	RINSE			10/06/09 00:06	1.0	2	

JYF 10/06/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 77.

Standards used: 1=S13057 2=S13058 3=S13065 4=S13066 5=S13067 6=S13068 7=S13063 8=S13064 9=S13061 10=S13059 11=S13060 12=S13062 13=S10997 14=S10998

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019400956

Date : 10/05/09 Reference : 09j05k00003
Sequence : MET26 09j05k00 Analyzed : 10/05/09 10:53

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1219511	5606073	49357	1488384	471962	46831	9310077	7556450	9866623	12795071
		LOWER LIMIT	365853	1681822	14807	446515	141589	14049	2793023	2266935	2959987	3838521
		UPPER LIMIT	1463413	6727288	59228	1786061	566354	56197	11172092	9067740	11839948	15354085
011	ICB		1193306	5497249	49692	1473056	469141	47394	9179227	7469242	9733955	12535281
014	ICSA		887022	5010213	47660	1421441	422747	45143	7668773	5774788	8921515	11181751
015	ICSAB		921380	5099934	47836	1427317	427727	44926	7706371	5783585	8928971	11227826
018	BLANK	QC514509	1063817	5158295	46598	1405678	449589	45006	8999556	7633410	9465220	12614235
019	BS	QC514727	1065830	5181323	46753	1439691	454620	45528	8943568	7551383	9499325	12566782
020	BSD	QC514728	1060475	5109757	46912	1413918	451697	45331	8826857	7542730	9327895	12453513
021	MS	QC514729	1029406	5231324	47478	1431129	454308	45662	8950622	7561120	9585897	12641201
022	MSD	QC514730	1014530	5189285	47617	1445063	457704	46379	8839807	7494331	9474340	12561933
023	CCV		1006420	5051376	46629	1426527	452760	45280	8753689	7408626	9396252	12386793
024	CCB		1048220	5118526	46819	1260017	414620	45750	9012646	7599028	9431297	12548724
025	ICSA		866473	4924742	47281	1386948	417470	44732	7578791	5729276	8786714	10965878
026	ICSAB		939661	5144570	48685	1439847	428694	45348	7666833	5749011	8956502	11162102
029	BLANK	QC514950	982767	5030839	46242	1418107	451235	45225	8905142	7654865	9413872	12461608
030	BS	QC514951	950162	5000373	45517	1392618	440621	44263	8850646	7632537	9329306	12420348
031	BSD	QC514952	1013122	4946562	45040	1380874	438553	43331	8773194	7644639	9260556	12399581
032	MSS	215326-001	908981	5386964	49147	1515862	442615	44412	8697140	7470808	10183602	12394333
033	SER	QC514955	939650	4992483	45719	1407706	441691	44126	8721382	7699221	9390649	12330129
034	MS	QC514953	870663	5178685	46805	1468329	436369	43577	8606088	7435890	9935868	12322927
035	MSD	QC514954	860905	5090691	46686	1440149	434550	43238	8547232	7383951	9759710	12309757
036	PDS	QC514956	853245	5169628	47386	1463462	433467	43554	8503214	7182335	9938785	12152861
037	CCV		954012	4969554	45075	1394161	441031	43697	8717370	7329616	9240297	12359163
038	CCB		982866	5020354	46592	1408420	448327	44916	8857048	7413312	9276492	12400781
039	MSS	215326-001	988668	4989754	45812	1406696	446463	44607	8843166	7723093	9389305	12342815
040	SER	QC514955	925512	4951580	45342	1388198	441864	44176	8773868	7585616	9240764	12324161
041	PDS	QC514956	900458	4953474	44191	1388670	435511	42195	8533228	7393946	9199143	12276033
042	CCV		946188	4984074	45613	1392746	440192	43951	8645186	7305279	9279623	12308566
043	CCB		974152	5049026	46354	1395071	446388	44777	8896848	7473580	9350891	12355683
044	BLANK	QC515174	978179	5023823	46555	1379670	443221	44879	8837681	7493232	9309575	12261681
045	LOQ	214798-001	958818	4975217	45883	1367524	436569	43888	8759733	7527311	9259051	12240313
046	MDLCHECK	211067-008	795513	4465463	41075	1263259	424486	42153	8553084	7825741	8810083	12114441
047	MDLCHECK	211067-016	754053	4362531	39470	1227972	426202	42511	8433732	7720700	8636549	12007301
048	CCV		1044355	4878403	44354	1360786	423900	42891	8475247	7014888	9091790	11887682
049	CCB		1117529	4957246	45632	1371514	433315	43842	8663703	7286946	9145882	12112023
050	BLANK	QC513688	840214	4594162	42093	1304160	424772	42226	8521251	7523599	8883992	12014245
051	BS	QC513689	837414	4589518	41353	1223007	401316	41791	8381273	7391769	8813329	12041832
052	BSD	QC513690	787971	4413722	41103	1227714	407390	41569	8189444	7130819	8540347	11630852
053	MSS	215118-001	805034	4510491	40763	1258509	422013	41860	8352068	7260101	8799744	11942129
054	MS	QC513691	905753	4478941	40375	1261866	414025	41373	8208071	7140073	8691517	11920437
055	MSD	QC513692	804323	4493237	40257	1258731	414186	41335	8219638	7092012	8643286	11810631
056	SAMPLE	215118-002	921156	4453934	40184	1256672	412570	41156	8174534	7181088	8565960	11670021
057	CCV		961704	4783964	42999	1305081	407412	40770	8192371	6952264	8730738	11670589
058	CCB		1001444	4789201	43349	1325183	416911	41641	8430464	7114186	8817070	11733711
059	BLANK	QC515081	962417	4689931	42579	1295395	410104	40862	8394570	7194175	8690231	11668649
060	BS	QC515082	972708	4659480	42112	1289583	406145	40760	8243493	7154153	8724302	11652835
061	BSD	QC515083	958059	4676149	42497	1297089	405112	40915	8267556	7152350	8675077	11647788
062	MSS	215322-001	948047	4717700	41987	1272531	399956	40263	8089432	6851818	8553471	11515645
063	SER	QC515086	951632	4672674	42365	1273875	410072	41608	8263277	7142553	8658258	11648156
064	MS	QC515084	938031	4693208	41806	1267035	395029	40171	8032368	6790511	8532225	11526918

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1019400956

Date : 10/05/09 Reference : 09j05k00003
Sequence : MET26 09j05k00 Analyzed : 10/05/09 10:53

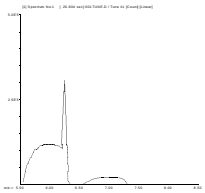
#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
067	MSD	QC515085	960189	4638480	41806	1263173	391456	40073	8029429	6801718	8534984	11489512
068	PDS	QC515087	975453	4773617	42402	1279806	394461	40364	8020764	6737709	8592342	11478459
069	SAMPLE	215322-002	1008658	4829659	43701	1305296	405438	41601	8104884	6743328	8653752	11543961
070	SAMPLE	215322-003	1024222	4795989	43444	1308965	403435	41053	8097223	6855144	8573147	11562360
071	CCV		1009642	4820356	43133	1308839	405303	41148	8169323	7070558	8827977	11684515
072	CCB		1058155	4854902	44102	1332833	415187	41988	8431009	7234447	8793773	11756544
073	SAMPLE	215322-004	1025438	4830289	43406	1307840	405020	41257	8227191	6990435	8709406	11643322
074	CCV		994537	4762519	43085	1306864	402649	40968	8070223	7037514	8715160	11659945
075	CCB		1011688	4792203	43291	1292813	409075	41596	8377732	7334338	8840042	11857616
076	ICSA		802443	4595931	43212	1216374	358179	40891	7117095	5528714	8164281	10468167
077	ICSAB		846578	4730242	44474	1325526	388815	41257	7239232	5565034	8363356	10632442

MET26 QC Tune Report

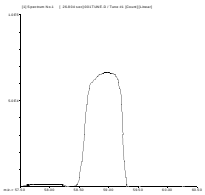
Data File: C:\ICPCHEM\1\DATA\09J05k00.B\001TUNE.D
Date Acquired: Oct 5 2009 10:36 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s13057
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

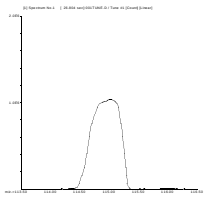
Element	Rep1	Rep2	Rep3	Rep4	Actual	Required	Flag
7 Li	127028	127377	125717	124603	1.22	5.00	
59 Co	408799	407758	405203	406841	0.24	5.00	
115 In	5928334	5932725	5915370	5910761	0.30	5.00	
205 Tl	376874	376716	376366	376210	0.53	5.00	



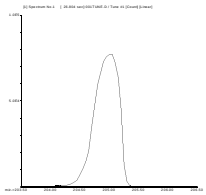
7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Filtrate: EPA 6020

Inst : MET26 Reviewer : ---
Calnum : 1019400956001 Date : 05-OCT-2009 10:53
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	09j05k00004	1019400956004		05-OCT-2009 11:03	S13065, S13058
L2	09j05k00005	1019400956005		05-OCT-2009 11:13	S13066, S13058
L3	09j05k00006	1019400956006		05-OCT-2009 11:23	S13067, S13058
L4	09j05k00007	1019400956007		05-OCT-2009 11:33	S13068, S13058
L5	09j05k00008	1019400956008		05-OCT-2009 11:44	S13063, S13058
L6	09j05k00009	1019400956009		05-OCT-2009 11:54	S13064, S13058

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.0050	0.0036	0.0035	0.0034	0.0034	0.0034	BLNK	-3.0890	292.081		0.0037	1.000	0.995	
Antimony	A	0.0066	0.0027	0.0026	0.0026	0.0027	0.0027	BLNK	-0.0059	365.924		0.0033	1.000	0.995	
Barium	A	0.0016	7.7E-4	7.4E-4	6.9E-4	7.2E-4	7.2E-4	BLNK	-0.0271	1397.26		8.8E-4	1.000	0.995	
Beryllium	A	0.0033	0.0029	0.0030	0.0030	0.0030	0.0031	BLNK	-0.0069	329.449		0.0030	1.000	0.995	
Cadmium	A	8.1E-4	6.7E-4	6.9E-4	6.9E-4	6.8E-4	7.2E-4	BLNK	-0.0089	1401.36		7.1E-4	0.999	0.995	
Calcium	A	7.9E-4	2.9E-4	2.2E-4	1.9E-4	1.8E-4	1.8E-4	BLNK	-24.315	5696.94		3.1E-4	1.000	0.995	
Lead	A	0.0172	0.0075	0.0065	0.0056	0.0055	0.0054	BLNK	-0.1974	185.036		0.0079	1.000	0.995	
Magnesium	A	0.0037	0.0027	0.0026	0.0026	0.0026	0.0026	BLNK	-1.2618	386.781		0.0028	1.000	0.995	
Potassium	A	0.0530	0.0141	0.0095	0.0056	0.0051	0.0051	BLNK	-90.608	197.099		0.0154	1.000	0.995	
Silver	A	0.0046	0.0033	0.0033	0.0033	0.0033	0.0033	BLNK	-0.0129	306.051		0.0035	1.000	0.995	
Thallium	A	0.0109	0.0067	0.0065	0.0065	0.0070	0.0070	BLNK	-0.0273	143.521		0.0074	1.000	0.995	
Arsenic	E	0.0071	0.0061	0.0058	0.0055	0.0057	0.0055	BLNK	-0.0256	180.810		0.0059	1.000	0.995	
Chromium	E	0.1611	0.0742	0.0610	0.0510	0.0499	0.0489	BLNK	-0.1484	20.3970		0.0743	1.000	0.995	
Manganese	E	0.0346	0.0225	0.0185	0.0173	0.0170	0.0166	BLNK	-0.0135	59.9739		0.0211	1.000	0.995	
Nickel	E	0.0567	0.0351	0.0324	0.0312	0.0301	0.0291	BLNK	-0.0249	34.1684		0.0358	1.000	0.995	
Sodium	E	0.0563	0.0149	0.0089	0.0042	0.0038	0.0036	BLNK	-137.92	276.204		0.0153	1.000	0.995	
Zinc	E	0.1404	0.0417	0.0240	0.0115	0.0100	0.0095	BLNK	-0.2013	103.992		0.0395	0.999	0.995	
Iron	H	0.0153	0.0094	0.0092	0.0087	0.0085	0.0085	BLNK	-1.5547	117.736		0.0099	1.000	0.995	
Selenium	H	0.0014	0.0011	0.0011	0.0010	0.0010	0.0010	BLNK	-0.0219	988.848		0.0011	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	14	50.00	0	100.0	-2	1000	-1	10000	0	20000	0
Antimony	A	0.100	**135**	0.500	-3	1.000	-4	10.00	-4	100.0	0	200.0	0
Barium	A	0.100	**102**	0.500	2	1.000	1	10.00	-3	100.0	0	200.0	0
Beryllium	A	0.100	1	0.500	-6	1.000	-1	10.00	-1	100.0	-3	200.0	1
Cadmium	A	0.100	5	0.500	-9	1.000	-4	10.00	-4	100.0	-4	200.0	1
Calcium	A	10.00	**105**	50.00	14	100.0	3	1000	6	10000	0	20000	0
Lead	A	0.100	20	0.500	-2	1.000	1	10.00	1	100.0	2	200.0	-1
Magnesium	A	10.00	**32**	50.00	2	100.0	0	1000	0	10000	1	20000	0
Potassium	A	10.00	**38**	50.00	-4	100.0	-4	1000	1	10000	0	20000	0
Silver	A	0.100	**27**	0.500	0	1.000	-1	10.00	0	100.0	1	200.0	0
Thallium	A	0.050	1	0.250	-15	0.500	-13	5.000	-7	50.00	0	100.0	0
Arsenic	E	0.100	3	0.500	6	1.000	2	10.00	0	100.0	2	200.0	-1
Chromium	E	0.100	**80**	0.500	**22**	1.000	10	10.00	3	100.0	2	200.0	0
Manganese	E	0.100	**94**	0.500	**32**	1.000	9	10.00	4	100.0	2	200.0	0
Nickel	E	0.100	**69**	0.500	15	1.000	8	10.00	6	100.0	3	200.0	-1
Sodium	E	10.00	**75**	50.00	**35**	100.0	8	1000	3	10000	3	20000	-1
Zinc	E	0.100	**1159**	0.500	**294**	1.000	**129**	10.00	18	100.0	3	200.0	-1
Iron	H	10.00	**65**	50.00	7	100.0	7	1000	3	10000	0	20000	0
Selenium	H	0.100	16	0.500	3	1.000	2	10.00	3	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26
Calnum : 1019400956001 Cal Date : 05-OCT-2009

ICV 1019400956010 (09j05k00010 05-OCT-2009) stds: S13061, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	10000	9995	ug/L	0	10	
Antimony	A	100.0	100.1	ug/L	0	10	
Barium	A	100.0	98.64	ug/L	-1	10	
Beryllium	A	100.0	96.24	ug/L	-4	10	
Cadmium	A	100.0	93.47	ug/L	-7	10	
Calcium	A	10000	9696	ug/L	-3	10	
Lead	A	100.0	99.47	ug/L	-1	10	
Magnesium	A	10000	9864	ug/L	-1	10	
Potassium	A	10000	9888	ug/L	-1	10	
Silver	A	100.0	101.0	ug/L	1	10	
Thallium	A	50.00	49.72	ug/L	-1	10	
Arsenic	E	100.0	99.07	ug/L	-1	10	
Chromium	E	100.0	98.22	ug/L	-2	10	
Manganese	E	100.0	97.16	ug/L	-3	10	
Nickel	E	100.0	99.25	ug/L	-1	10	
Sodium	E	10000	9959	ug/L	0	10	
Zinc	E	100.0	99.18	ug/L	-1	10	
Iron	H	10000	9753	ug/L	-2	10	
Selenium	H	100.0	98.18	ug/L	-2	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956011 File : 09j05k00011 Time : 05-OCT-2009 12:13
Cal : 1019400956001 Caldate : 05-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.03010]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	ND	10.00	6.433	ug/L	
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1219511	1193306	-2.15
Scandium	A	5606073	5497249	-1.94
Scandium	E	49357	49692	0.68
Scandium	H	1488384	1473056	-1.03
Germanium	H	471962	469141	-0.60
Germanium	E	46831	47394	1.20
Indium	A	9310077	9179227	-1.41
Bismuth	A	7556450	7469242	-1.15
Yttrium	A	9866623	9733955	-1.34
Terbium	A	12795071	12535281	-2.03

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956014 File : 09j05k00014 Time : 05-OCT-2009 12:40
Cal : 1019400956001 Caldate : 05-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2927	0.1000	ug/L	!a+
Barium	A	1.266	0.1000	ug/L	!a+
Beryllium	A	[0.02570]	0.1000	ug/L	
Cadmium	A	2.634	0.1000	ug/L	!a+
Lead	A	1.215	0.1000	ug/L	!a+
Silver	A	0.1737	0.1000	ug/L	!a+
Thallium	A	0.08650	0.05000	ug/L	!a+
Arsenic	E	0.3607	0.1000	ug/L	!a+
Chromium	E	1.132	0.1000	ug/L	!a+
Manganese	E	6.381	0.1000	ug/L	!a+
Nickel	E	3.777	0.1000	ug/L	!a+
Zinc	E	6.729	0.1000	ug/L	!a+
Selenium	H	0.2198	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	105000	ug/L	105
Calcium	A	300000	314200	ug/L	105
Magnesium	A	100000	100000	ug/L	100
Molybdenum	A	2000	2067	ug/L	103
Potassium	A	100000	0	ug/L	0
Sodium	E	250000	245800	ug/L	98
Iron	H	250000	249900	ug/L	100

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1219511	887022	-27.26
Scandium	A	5606073	5010213	-10.63
Scandium	E	49357	47660	-3.44
Scandium	H	1488384	1421441	-4.50
Germanium	H	471962	422747	-10.43
Germanium	E	46831	45143	-3.60
Indium	A	9310077	7668773	-17.63
Bismuth	A	7556450	5774788	-23.58
Yttrium	A	9866623	8921515	-9.58
Terbium	A	12795071	11181751	-12.61

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956015 File : 09j05k00015 Time : 05-OCT-2009 12:50
Cal : 1019400956001 Caldate : 05-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98300	ug/L	-2		
Cadmium	A	100.0	96.21	ug/L	-4	20	
Calcium	A	300000	293400	ug/L	-2		
Magnesium	A	100000	94420	ug/L	-6		
Potassium	A	100000	99260	ug/L	-1		
Silver	A	50.00	51.60	ug/L	3	20	
Arsenic	E	100.0	101.0	ug/L	1	20	
Chromium	E	200.0	195.0	ug/L	-2	20	
Manganese	E	200.0	198.0	ug/L	-1	20	
Nickel	E	200.0	179.9	ug/L	-10	20	
Sodium	E	250000	234100	ug/L	-6		
Zinc	E	100.0	90.92	ug/L	-9	20	
Iron	H	250000	235500	ug/L	-6		
Selenium	H	100.0	99.20	ug/L	-1	20	

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1488384	1427317	-4.10
Scandium	A	5606073	5099934	-9.03
Scandium	E	49357	47836	-3.08
Germanium	H	471962	427727	-9.37
Germanium	E	46831	44926	-4.07
Indium	A	9310077	7706371	-17.23
Yttrium	A	9866623	8928971	-9.50

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956023 File : 09j05k00023 Time : 05-OCT-2009 14:11
Cal : 1019400956001 Caldate : 05-OCT-2009
Standards: S13062, S13058

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.0037	0.0034	10000	9925	ug/L	-1	10	
Antimony	A	0.0033	0.0028	100.0	100.8	ug/L	1	10	
Barium	A	8.8E-4	6.9E-4	100.0	97.02	ug/L	-3	10	
Beryllium	A	0.0030	0.0030	100.0	99.25	ug/L	-1	10	
Cadmium	A	7.1E-4	6.6E-4	100.0	92.95	ug/L	-7	10	
Calcium	A	3.1E-4	1.7E-4	10000	9828	ug/L	-2	10	
Lead	A	0.0079	0.0055	100.0	101.4	ug/L	1	10	
Magnesium	A	0.0028	0.0025	10000	9682	ug/L	-3	10	
Potassium	A	0.0154	0.0051	10000	9979	ug/L	0	10	
Silver	A	0.0035	0.0033	100.0	101.2	ug/L	1	10	
Thallium	A	0.0074	0.0069	50.00	49.49	ug/L	-1	10	
Arsenic	E	0.0059	0.0054	100.0	98.22	ug/L	-2	10	
Chromium	E	0.0743	0.0482	100.0	98.24	ug/L	-2	10	
Manganese	E	0.0211	0.0162	100.0	97.16	ug/L	-3	10	
Nickel	E	0.0358	0.0290	100.0	99.18	ug/L	-1	10	
Sodium	E	0.0153	0.0036	10000	9878	ug/L	-1	10	
Zinc	E	0.0395	0.0095	100.0	98.47	ug/L	-2	10	
Iron	H	0.0099	0.0084	10000	9930	ug/L	-1	10	
Selenium	H	0.0011	10.0E-4	100.0	98.73	ug/L	-1	10	

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1219511	1006420	-17.47
Scandium	A	5606073	5051376	-9.89
Scandium	E	49357	46629	-5.53
Scandium	H	1488384	1426527	-4.16
Germanium	H	471962	452760	-4.07
Germanium	E	46831	45280	-3.31
Indium	A	9310077	8753689	-5.98
Bismuth	A	7556450	7408626	-1.96
Yttrium	A	9866623	9396252	-4.77
Terbium	A	12795071	12386793	-3.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956024 File : 09j05k00024 Time : 05-OCT-2009 14:21
Cal : 1019400956001 Caldate : 05-OCT-2009

Analyte	Ch	Quant	IQL	2X MDL	Units	Flags
Aluminum	A	ND	10.00	4.378	ug/L	
Antimony	A	ND	0.1000	0.03964	ug/L	
Barium	A	ND	0.1000	0.05024	ug/L	
Beryllium	A	ND	0.1000	0.04753	ug/L	
Cadmium	A	ND	0.1000	0.03331	ug/L	
Calcium	A	ND	10.00	5.726	ug/L	
Lead	A	ND	0.1000	0.05845	ug/L	
Magnesium	A	ND	10.00	5.023	ug/L	
Potassium	A	ND	10.00	5.867	ug/L	
Silver	A	ND	0.1000	0.02719	ug/L	
Thallium	A	[0.02330]	0.05000	0.01103	ug/L	!ib
Arsenic	E	ND	0.1000	0.04565	ug/L	
Chromium	E	ND	0.1000	0.05905	ug/L	
Manganese	E	ND	0.1000	0.05339	ug/L	
Nickel	E	ND	0.1000	0.04519	ug/L	
Sodium	E	[7.269]	10.00	6.433	ug/L	!ib
Zinc	E	ND	0.1000	0.4339	ug/L	
Iron	H	ND	10.00	0.8425	ug/L	
Selenium	H	ND	0.1000	0.06175	ug/L	

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1219511	1048220	-14.05
Scandium	A	5606073	5118526	-8.70
Scandium	E	49357	46819	-5.14
Scandium	H	1488384	1260017	-15.34
Germanium	H	471962	414620	-12.15
Germanium	E	46831	45750	-2.31
Indium	A	9310077	9012646	-3.19
Bismuth	A	7556450	7599028	0.56
Yttrium	A	9866623	9431297	-4.41
Terbium	A	12795071	12548724	-1.93

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956025 File : 09j05k00025 Time : 05-OCT-2009 14:31
Cal : 1019400956001 Caldate : 05-OCT-2009
Standards: S13059, S13058

Analyte	Ch	Quant	IQL	Units	Flags
Antimony	A	0.2893	0.1000	ug/L	!a+
Barium	A	1.249	0.1000	ug/L	!a+
Beryllium	A	[0.03200]	0.1000	ug/L	
Cadmium	A	2.601	0.1000	ug/L	!a+
Lead	A	1.233	0.1000	ug/L	!a+
Silver	A	0.1726	0.1000	ug/L	!a+
Thallium	A	0.09510	0.05000	ug/L	!a+
Arsenic	E	0.3192	0.1000	ug/L	!a+
Chromium	E	1.125	0.1000	ug/L	!a+
Manganese	E	6.501	0.1000	ug/L	!a+
Nickel	E	3.731	0.1000	ug/L	!a+
Zinc	E	6.768	0.1000	ug/L	!a+
Selenium	H	0.2076	0.1000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	104900	ug/L	105
Calcium	A	300000	316000	ug/L	105
Magnesium	A	100000	99270	ug/L	99
Molybdenum	A	2000	2090	ug/L	105
Potassium	A	100000	105700	ug/L	106
Sodium	E	250000	246900	ug/L	99
Iron	H	250000	252300	ug/L	101

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1219511	866473	-28.95
Scandium	A	5606073	4924742	-12.15
Scandium	E	49357	47281	-4.21
Scandium	H	1488384	1386948	-6.82
Germanium	H	471962	417470	-11.55
Germanium	E	46831	44732	-4.48
Indium	A	9310077	7578791	-18.60
Bismuth	A	7556450	5729276	-24.18
Yttrium	A	9866623	8786714	-10.95
Terbium	A	12795071	10965878	-14.30

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 215072 METALS Filtrate
EPA 6020

Inst : MET26 IDF : 1.0
Seqnum : 1019400956026 File : 09j05k00026 Time : 05-OCT-2009 14:42
Cal : 1019400956001 Caldate : 05-OCT-2009
Standards: S13060, S13058

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98150	ug/L	-2		
Cadmium	A	100.0	96.00	ug/L	-4	20	
Calcium	A	300000	295300	ug/L	-2		
Magnesium	A	100000	94430	ug/L	-6		
Potassium	A	100000	99030	ug/L	-1		
Silver	A	50.00	51.80	ug/L	4	20	
Arsenic	E	100.0	100.9	ug/L	1	20	
Chromium	E	200.0	192.0	ug/L	-4	20	
Manganese	E	200.0	197.2	ug/L	-1	20	
Nickel	E	200.0	176.9	ug/L	-12	20	
Sodium	E	250000	236500	ug/L	-5		
Zinc	E	100.0	90.37	ug/L	-10	20	
Iron	H	250000	237200	ug/L	-5		
Selenium	H	100.0	99.57	ug/L	0	20	

ISTD (ICALBLK 09j05k00003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1488384	1439847	-3.26
Scandium	A	5606073	5144570	-8.23
Scandium	E	49357	48685	-1.36
Germanium	H	471962	428694	-9.17
Germanium	E	46831	45348	-3.17
Indium	A	9310077	7666833	-17.65
Yttrium	A	9866623	8956502	-9.22

SAMPLE PREPARATION SUMMARY

Batch # : 155517 Analysis : ICAP
Started By : MCB Prep Date : 30-SEP-2009 21:00 Finished By : MCB
Method : METHOD Units : mL
Spike #1 ID : S12256 Spike #2 ID : S12257

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215072-005		Filtrate	50	50	1	1.0						TAL/ICP	
215072-010		Filtrate	50	50	1	1.0						TAL/ICP	
215072-011		Filtrate	50	50	1	1.0						TAL/ICP	
215256-001		Filtrate	50	50	1	1.0						TAL/ICP	
215256-002		Filtrate	50	50	1	1.0						TAL/ICP	
QC514509	BLANK	Filtrate	50	50	1	1.0							
QC514510	BS	Filtrate	50	50	1	1.0		.25	.25				
QC514511	BSD	Filtrate	50	50	1	1.0		.25	.25				
QC514512	MS	Filtrate	50	50	1	1.0		.25	.25				
QC514513	MSD	Filtrate	50	50	1	1.0		.25	.25				
QC514514	SER	Filtrate	50	50	1	1.0							
QC514515	PDS	Filtrate	50	50	1	1.0							

Reviewed by: HDD Date: 10/05/09

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 155517
Digested by: MCB III
Date Digested: 9/30/09

Digestion Method
- ☐ EPA 200.8 for ICP-MS
- ☐ EPA 3005A for ICP-MS
- ☒ FILTRATE PREP

BK 2944
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Sample #	Sample #	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK		50	50	N	
BS		↓	↓	↓	
BSD		↓	↓	↓	
MS-256-001	D	↓	↓	↓	
MSD-256-001	↓	↓	↓	↓	
215256-001	↓	↓	↓	↓	
↓ -002	↓	↓	↓	↓	
215072-005	≡	↓	↓	↓	
↓ -010	↓	↓	↓	↓	
↓ -011	≡	↓	↓	↓	

	Reagent ID or LIMS #		Initials / Date
Digestion tubes, lot #	J79714-261		
.25 mL of spike solution (Std1) was added to all spikes	S12256		MCB III 9/30/09
.25 mL of spike solution (Std2) was added to all spikes	S12257		↓
digestion temperature (90-95 degrees C)	N/A		↓
digestion begun at (time)	10:00pm		↓
concentrated HCl	H19031	JT BAKER	↓
concentrated HNO3	H14024	↓	↓
digestion ended at (time)	10:00pm		↓
☐ filtered thru' Whatman # 541	N/A		↓
Relinquished to ICP group	MS		↓

9-30-09

Michael Crocker 9/30/09
Prep Chemist / Date

Continued from page ____
Continued on page ____

Reviewed by / Date

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 849385187

Instrument : MET14 Begun : 09/24/09 11:47
Method : EPA 7470A SOP Version : HG_water_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	155246	ICALBLK	STD01REP1			09/24/09 11:47	1.0		
002	155246	ICAL	STD02REP1			09/24/09 11:49	1.0	1	
003	155246	ICAL	STD03REP1			09/24/09 11:52	1.0	1	
004	155246	ICAL	STD04REP1			09/24/09 11:54	1.0	1	
005	155246	ICAL	STD05REP1			09/24/09 11:56	1.0	1	
006	155246	ICAL	STD06REP1			09/24/09 11:58	1.0	1	
007	155246	ICV				09/24/09 12:08	1.0	2	
008	155246	ICB				09/24/09 12:10	1.0		
009	155246	BLANK	QC513410	Water	155246	09/24/09 12:15	1.0		
010	155246	BS	QC513411	Water	155246	09/24/09 12:18	1.0		
011	155246	BSD	QC513412	Water	155246	09/24/09 12:21	1.0		
012	155246	MSS	215133-001	Filtrate	155246	09/24/09 12:23	1.0		
013	155246	MS	QC513413	Filtrate	155246	09/24/09 12:25	1.0		
014	155246	MSD	QC513414	Filtrate	155246	09/24/09 12:27	1.0		
015	155246	SER	QC513415	Filtrate	155246	09/24/09 12:29	5.0		
016	155246	SAMPLE	215072-005	Filtrate	155246	09/24/09 12:31	1.0		
017	155246	SAMPLE	215072-010	Filtrate	155246	09/24/09 12:34	1.0		
018	155246	SAMPLE	215072-011	Filtrate	155246	09/24/09 12:36	1.0		
019	155246	CCV				09/24/09 12:39	1.0	3	
020	155246	CCB				09/24/09 12:41	1.0		
021	155246	SAMPLE	215099-001	Water	155246	09/24/09 12:43	1.0		
022	155246	SAMPLE	215104-002	Filtrate	155246	09/24/09 12:45	1.0		
023	155246	SAMPLE	215104-003	Filtrate	155246	09/24/09 12:47	1.0		
024	155246	SAMPLE	215104-004	Filtrate	155246	09/24/09 12:49	1.0		
025	155246	SAMPLE	215119-001	Water	155246	09/24/09 12:52	1.0		
026	155246	SAMPLE	215120-001	Water	155246	09/24/09 12:54	1.0		
027	155246	SAMPLE	215120-005	Water	155246	09/24/09 12:57	1.0		
028	155246	SAMPLE	215133-002	Filtrate	155246	09/24/09 12:59	1.0		
029	155246	SAMPLE	215133-003	Filtrate	155246	09/24/09 13:01	1.0		
030	155246	SAMPLE	215134-005	Filtrate	155246	09/24/09 13:03	1.0		
031	155246	CCV				09/24/09 13:05	1.0	3	
032	155246	CCB				09/24/09 13:07	1.0		
033	155246	SAMPLE	215138-013	Filtrate	155246	09/24/09 13:10	1.0		
034	155246	SAMPLE	215138-014	Filtrate	155246	09/24/09 13:12	1.0		
035	155246	SAMPLE	215138-013	Water	155246	09/24/09 13:14	1.0		
036	155246	SAMPLE	215138-014	Water	155246	09/24/09 13:16	1.0		
037	155246	CCV				09/24/09 13:18	1.0	3	
038	155246	CCB				09/24/09 13:21	1.0		

WNH 09/24/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S13004 2=S13006 3=S13007

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 METALS Filtrate: EPA 7470A

Inst : MET14
Calnum : 849385187001
Units : ug/L

Date : 24-SEP-2009 11:47
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	155246	849385187002	STD02REP1	24-SEP-2009 11:49	S13004 (500X)
L2	155246	849385187003	STD03REP1	24-SEP-2009 11:52	S13004 (200X)
L3	155246	849385187004	STD04REP1	24-SEP-2009 11:54	S13004 (50X)
L4	155246	849385187005	STD05REP1	24-SEP-2009 11:56	S13004 (20X)
L5	155246	849385187006	STD06REP1	24-SEP-2009 11:58	S13004 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	4360.0	3758.0	3852.5	3855.6	3658.3	LINR	-0.0642	2.72E-4		3896.9	0.999	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-13	0.500	-10	2.000	2	5.000	4	10.00	-1

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 METALS Filtrate
EPA 7470A

Inst : MET14
Calnum : 849385187001 Cal Date : 24-SEP-2009 Type : WATER

ICV 849385187007 (24-SEP-2009) stds: S13006

Analyte	Spiked	Quant	Units	%D	Max	Flags
Mercury	5.000	4.960	ug/L	-1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849385187008 File : 155246 Time : 24-SEP-2009 12:10
Cal : 849385187001 Caldate : 24-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 METALS Filtrate
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849385187019 File : 155246 Time : 24-SEP-2009 12:39
Cal : 849385187001 Caldate : 24-SEP-2009 Caltype : WATER
Standards: S13007

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Mercury	3896.9	3716.2	5.000	5.000	ug/L	0	20	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 METALS Filtrate
EPA 7470A

Inst : MET14 IDF : 1.0
Seqnum : 849385187020 File : 155246 Time : 24-SEP-2009 12:41
Cal : 849385187001 Caldate : 24-SEP-2009 Caltype : WATER

Analyte	Quant	IQL	MDL	Units	Flags
Mercury	ND	0.2000	0.03335	ug/L	

SAMPLE PREPARATION SUMMARY

Batch # : 155246
Started By : WNH
Method : METHOD
Spike #1 ID : S13004

Prep Date : 24-SEP-2009 09:05

Analysis : HG
Finished By : WNH
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
215072-005		Filtrate	50	50	1	1.0						TAL/HG	
215072-005		Water			1	0						(rebatched)	
215072-010		Filtrate	50	50	1	1.0						TAL/HG	
215072-010		Water			1	0						(rebatched)	
215072-011		Filtrate	50	50	1	1.0						TAL/HG	
215072-011		Water			1	0						(rebatched)	
215099-001		Water	50	50	1	1.0						HG-200	
215104-002		Filtrate	50	50	1	1.0						T22/HG	
215104-003		Filtrate	50	50	1	1.0						T22/HG	
215104-004		Filtrate	50	50	1	1.0						T22/HG	
215119-001		Water	50	50	1	1.0						T22/HG	
215120-001		Water	50	50	1	1.0						HG-200	
215120-005		Water	50	50	1	1.0						HG-200	
215133-001		Filtrate	50	50	1	1.0						PP13/HG	
215133-002		Filtrate	50	50	1	1.0						PP13/HG	
215133-003		Filtrate	50	50	1	1.0						PP13/HG	
215134-005		Filtrate	50	50	1	1.0						PP13/HG	
215138-013		Filtrate	50	50	1	1.0						TAL/HG	
215138-013		Water	50	50	1	1.0						TAL/HG	
215138-014		Filtrate	50	50	1	1.0						TAL/HG	
215138-014		Water	50	50	1	1.0						TAL/HG	
QC513410	BLANK	Water	50	50	1	1.0							
QC513411	BS	Water	50	50	1	1.0		1.25					
QC513412	BSD	Water	50	50	1	1.0		1.25					
QC513413	MS	Filtrate	50	50	1	1.0		1.25					
QC513414	MSD	Filtrate	50	50	1	1.0		1.25					
QC513415	SER	Filtrate	50	50	1	1.0							

Reviewed by: WNH Date: 09/24/09

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 155246
Date Digested: 9/24/09

Digestion Method
☑ EPA 7470A/ EPA 245.1
☐ _____

BK2911
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Sample #	container ID	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
215072-005	D	50	50	N	
10	D				
11	E				
215099-001	A				
215104-002	H				
3	H				
4	G				
215119-001	B				
215120-001	A				
5	A				
215133-001	K				MSS
2	A				
3	A				
215134-005	W				
215138-013	H				FF
14	I				FF
13	I				
14	H				
Blank QC513410					
BS 1					
BSD 2					
MS 3					
MSD 4					

	Reagent ID/ LIMS# / Time	Initials / Date
Digestion Tube Lot #	ELC 09167	9/24/09
1.25 mL of spike solution was added to all spikes	513004	
ICAL Source LIMS S#	513005	
ICV / CCV LIMS S#	513006 / 513007	
Digestion of Samples & Standards: Digestion Temperature (degrees C)	95°	
Digestion Started at (time)	905	
concentrated H_2SO_4	G35026	
concentrated HNO_3	1t12022	
5% $KMnO_4$	092209	
5% $K_2S_2O_8$	062209	
NaCl.hydroxylamine hydrochloride	090209	
Stannous Chloride	092109	
Digestion Completed at (time)	1105	
☐ filtered thru' 0.45 um syringe filter (lot #)	—	—

9/24/09
Prep Chemist / Date

Continued from page ____
Continued on page ____

9/24/09
Reviewed by / Date

Laboratory Job Number 215072

ANALYTICAL REPORT

Ion Chromatography

Matrix: Water

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Matrix:	Water	Batch#:	155155
Units:	mg/L	Received:	09/19/09

Field ID: ASE-72B-9C1 Lab ID: 215072-005
Type: SAMPLE Sampled: 09/17/09 09:40

Analyte	Result	RL	Diln Fac	Analyzed	ADEQ Flags
Fluoride	0.26	0.10	1.000	09/23/09 09:54	
Chloride	250	5.0	25.00	09/22/09 13:20	D2 M3
Nitrogen, Nitrate	5.5 b	0.10	2.000	09/22/09 21:21	D2 H4
Sulfate	140	5.0	10.00	09/23/09 02:53	D2

Field ID: ASE-49B-9C1 Lab ID: 215072-010
Type: SAMPLE Sampled: 09/17/09 10:55

Analyte	Result	RL	Diln Fac	Analyzed	ADEQ Flags
Fluoride	0.37	0.10	1.000	09/23/09 03:11	
Chloride	190	5.0	25.00	09/22/09 14:12	D1
Nitrogen, Nitrate	5.2 b	0.10	2.000	09/22/09 21:38	D2 H4
Sulfate	79	1.0	2.000	09/22/09 21:38	D2

Field ID: PZ-1B-9C1 Lab ID: 215072-011
Type: SAMPLE Sampled: 09/17/09 11:55

Analyte	Result	RL	Diln Fac	Analyzed	ADEQ Flags
Fluoride	0.30	0.10	1.000	09/23/09 06:06	
Chloride	290	5.0	25.00	09/22/09 14:30	D2
Nitrogen, Nitrate	7.8 b	0.25	5.000	09/22/09 21:56	D2 H4
Sulfate	250	13	25.00	09/22/09 14:30	D2

Type: BLANK Diln Fac: 1.000
Lab ID: QC513033 Analyzed: 09/22/09 10:34

Analyte	Result	RL	ADEQ Flags
Fluoride	ND	0.10	
Chloride	ND	0.20	
Nitrogen, Nitrate	ND	0.05	
Sulfate	ND	0.50	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC513034	Batch#:	155155
Matrix:	Water	Analyzed:	09/22/09 10:52
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	2.000	2.087	104	90-110	
Chloride	4.000	3.851	96	90-110	
Nitrogen, Nitrate	1.000	0.9856	99	90-110	
Sulfate	10.00	9.499	95	90-110	

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 300.0
Field ID:	ASE-72B-9C1	Diln Fac:	25.00
MSS Lab ID:	215072-005	Batch#:	155155
Matrix:	Water	Sampled:	09/17/09 09:40
Units:	mg/L	Received:	09/19/09

Type: MS Analyzed: 09/23/09 04:56
Lab ID: QC513134

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Fluoride	0.2601	25.00	26.37	104	80-120	D2
Chloride	250.2	50.00	300.0	100 NM	80-120	D2 M3
Nitrogen, Nitrate	5.494	12.50	18.03	100	80-120	D2
Sulfate	143.4	125.0	267.2	99	80-120	D2

Type: MSD Analyzed: 09/23/09 05:14
Lab ID: QC513135

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Fluoride	25.00	25.94	103	80-120	2	20	D2
Chloride	50.00	299.3	98 NM	80-120	0	20	D2 M3
Nitrogen, Nitrate	12.50	17.94	100	80-120	1	20	D2
Sulfate	125.0	266.4	98	80-120	0	20	D2

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 215072 IC Water: EPA 300.0

Inst : IC01
Calnum : 609314572001
Units : mg/L

Name : ico1 ical 218
Date : 06-AUG-2009 11:27
X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	218_9	609314572009	L1	06-AUG-2009 11:27	S12185 (500X)
L2	218_10	609314572010	L2	06-AUG-2009 11:45	S12185 (250X)
L3	218_11	609314572011	L3	06-AUG-2009 12:02	S12185 (100X)
L4	218_12	609314572012	L4	06-AUG-2009 12:20	S12185 (25X)
L5	218_13	609314572013	L5	06-AUG-2009 12:37	S12185 (10X)
L6	218_14	609314572014	L6	06-AUG-2009 12:55	S12185 (5X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2557	0.2500	0.2715	0.2753	0.2843	0.3026	QORG		0.26664	0.003595	0.2732	1.000	0.990	
Chloride	0.2116	0.1966	0.2046	0.2030	0.2174	0.2378	QORG		0.19635	0.002075	0.2118	1.000	0.990	
Nitrogen, Nitrate	0.5119	0.5123	0.5161	0.5056	0.5255	0.5510	QORG		0.49875	0.010464	0.5204	1.000	0.990	
Sulfate	0.1616	0.1526	0.1571	0.1521	0.1619	0.1725	QORG		0.15021	4.469E-4	0.1596	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Fluoride	0.100	-4	0.200	-6	0.500	1	2.000	1	5.000	0	10.00	0
Chloride	0.200	7	0.400	0	1.000	3	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrate	0.050	3	0.100	2	0.250	3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	7	1.000	1	2.500	4	10.00	-2	25.00	0	50.00	0

JLM 08/06/09 : ical pts integrated to match previous icals

Analyst: JLM Date: 08/07/09 Reviewer: EAH Date: 08/10/09

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 215072 IC Water
EPA 300.0

Inst : IC01 Name : ico1 ical 218
Calnum : 609314572001 Cal Date : 06-AUG-2009

ICV 609314572016 (218_16 06-AUG-2009) stds: S10785 (25X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.8000	0.7505	mg/L	-6	10	
Chloride	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	1.000	0.9624	mg/L	-4	10	
Sulfate	6.000	5.820	mg/L	-3	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : L IDF : 1.0
Seqnum : 609382146011 File : 265_11 Time : 22-SEP-2009 10:16
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2850	0.5000	0.5306	mg/L	6	10	
Chloride	0.2118	0.1948	1.000	0.9819	mg/L	-2	10	
Nitrogen, Nitrate	0.5204	0.4973	0.2500	0.2480	mg/L	-1	10	
Sulfate	0.1596	0.1525	2.500	2.519	mg/L	1	10	

MJB 09/22/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/22/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609382146022 File : 265_22 Time : 22-SEP-2009 13:37
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2892	2.000	2.109	mg/L	5	10	
Chloride	0.2118	0.1983	4.000	3.880	mg/L	-3	10	
Nitrogen, Nitrate	0.5204	0.4937	1.000	0.9701	mg/L	-3	10	
Sulfate	0.1596	0.1467	10.00	9.495	mg/L	-5	10	

MJB 09/22/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/22/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609382146034 File : 265_34 Time : 22-SEP-2009 17:48
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.3068	5.000	5.365	mg/L	7	10	
Chloride	0.2118	0.2138	10.00	9.861	mg/L	-1	10	
Nitrogen, Nitrate	0.5204	0.5215	2.500	2.485	mg/L	-1	10	
Sulfate	0.1596	0.1584	25.00	24.56	mg/L	-2	10	

MJB 09/22/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/22/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609382146048 File : 265_48 Time : 22-SEP-2009 22:13
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2949	2.000	2.149	mg/L	7	10	
Chloride	0.2118	0.2027	4.000	3.964	mg/L	-1	10	
Nitrogen, Nitrate	0.5204	0.5066	1.000	0.9950	mg/L	-1	10	
Sulfate	0.1596	0.1504	10.00	9.733	mg/L	-3	10	

MJB 09/23/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609382146067 File : 265_67 Time : 23-SEP-2009 03:46
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2995	5.000	5.244	mg/L	5	10	
Chloride	0.2118	0.2128	10.00	9.818	mg/L	-2	10	
Nitrogen, Nitrate	0.5204	0.5174	2.500	2.466	mg/L	-1	10	
Sulfate	0.1596	0.1573	25.00	24.40	mg/L	-2	10	

MJB 09/23/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 609382146080 File : 265_80 Time : 23-SEP-2009 07:34
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2907	2.000	2.120	mg/L	6	10	
Chloride	0.2118	0.2017	4.000	3.944	mg/L	-1	10	
Nitrogen, Nitrate	0.5204	0.5064	1.000	0.9945	mg/L	-1	10	
Sulfate	0.1596	0.1493	10.00	9.660	mg/L	-3	10	

MJB 09/23/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 609382146090 File : 265_90 Time : 23-SEP-2009 10:29
Cal : 609314572001 Caldate : 06-AUG-2009
Standards: S12185 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2732	0.2949	5.000	5.170	mg/L	3	10	
Chloride	0.2118	0.2117	10.00	9.771	mg/L	-2	10	
Nitrogen, Nitrate	0.5204	0.5186	2.500	2.471	mg/L	-1	10	
Sulfate	0.1596	0.1563	25.00	24.26	mg/L	-3	10	

MJB 09/23/09 : Integrated to match integration of ICAL and CCV .

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS BLANK USER REPORT FOR 215072 IC Water
EPA 300.0

Inst : IC01 Run Name : QC513033 IDF : 1.0
Seqnum : 609382146012.1 File : 265_12 Time : 22-SEP-2009 10:34

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	u
Chloride	609314572001	06-AUG-2009	[0.01697]	0.2000	0.01164	mg/L	u
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	u
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	u

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 10/01/09

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609382146023 File : 265_23 Time : 22-SEP-2009 13:55

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	ND	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: MJB Date: 09/22/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609382146035 File : 265_35 Time : 22-SEP-2009 18:06

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01796]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: MJB Date: 09/22/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609382146049 File : 265_49 Time : 22-SEP-2009 22:31

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.02851]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609382146068 File : 265_68 Time : 23-SEP-2009 04:03

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.03588]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609382146081 File : 265_81 Time : 23-SEP-2009 07:51

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.01578]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 215072 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 609382146091 File : 265_91 Time : 23-SEP-2009 10:46

Analyte	Cal	Caldate	Quant	IQL	MDL	Units	Flags
Fluoride	609314572001	06-AUG-2009	ND	0.1000	0.008005	mg/L	
Chloride	609314572001	06-AUG-2009	[0.02476]	0.2000	0.01164	mg/L	
Nitrogen, Nitrate	609314572001	06-AUG-2009	ND	0.05000	0.005240	mg/L	
Sulfate	609314572001	06-AUG-2009	ND	0.5000	0.04655	mg/L	

Analyst: JLM Date: 09/23/09 Reviewer: LW Date: 09/25/09

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609314572

Instrument : IC01 Begun : 08/06/09 10:52
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	218_7	X	BLK			08/06/09 10:52	1.0		
008	218_8	IB	CALIB			08/06/09 11:10	1.0		
009	218_9	ICAL	L1			08/06/09 11:27	1.0	1	
010	218_10	ICAL	L2			08/06/09 11:45	1.0	1	
011	218_11	ICAL	L3			08/06/09 12:02	1.0	1	
012	218_12	ICAL	L4			08/06/09 12:20	1.0	1	
013	218_13	ICAL	L5			08/06/09 12:37	1.0	1	
014	218_14	ICAL	L6			08/06/09 12:55	1.0	1	
015	218_15	ICB				08/06/09 13:12	1.0		
016	218_16	ICV				08/06/09 13:30	1.0	2	
017	218_17	CCB/MB	QC506475	Water	153603	08/06/09 13:47	1.0		
018	218_18	BS	QC506476	Water	153603	08/06/09 14:05	1.0	1	
019	218_19	BSD	QC506477	Water	153603	08/06/09 14:22	1.0	1	
020	218_20	SAMPLE	213964-004	Water	153603	08/06/09 14:40	1.0		1:CL=87
021	218_21	MSS	213983-001	Water	153603	08/06/09 15:05	2000		
022	218_22	MSS	213983-001	Water	153603	08/06/09 15:30	100.0		1:CL=130
023	218_23	X	BLK		153603	08/06/09 15:48	1.0		
024	218_24	MSS	213983-001	Water	153603	08/06/09 16:05	50.0		2:CL=200
025	218_25	X	BLK		153603	08/06/09 16:23	1.0		
026	218_26	MS	QC506482	Water	153603	08/06/09 16:40	2000	1	
027	218_27	MSD	QC506483	Water	153603	08/06/09 16:58	2000	1	
028	218_28	CCV	H		153603	08/06/09 17:16	1.0	1	
029	218_29	CCB			153603	08/06/09 17:33	1.0		
030	218_30	BLANK	QC506491	Soil	153606	08/06/09 17:51	1.0		
031	218_31	BS	QC506492	Soil	153606	08/06/09 18:08	1.0	1	
032	218_32	BSD	QC506493	Soil	153606	08/06/09 18:26	1.0	1	
033	218_33	SAMPLE	213697-016	Soil	153606	08/06/09 18:43	1.0		4:CL=57
034	218_34	X	BLK		153606	08/06/09 19:03	1.0		
035	218_35	SDUP	QC506494	Soil	153606	08/06/09 19:21	1.0		3:CL=55
036	218_36	X	BLK		153606	08/06/09 19:38	1.0		
037	218_37	MSS	213697-016	Soil	153606	08/06/09 19:56	5.0		
038	218_38	SDUP	QC506494	Soil	153606	08/06/09 20:13	5.0		
039	218_39	MSS	213697-016	Soil	153606	08/06/09 20:31	10.0		
040	218_40	SDUP	QC506494	Soil	153606	08/06/09 20:48	10.0		
041	218_41	CCV	M		153606	08/06/09 21:06	1.0	1	
042	218_42	CCB			153606	08/06/09 21:23	1.0		
043	218_43	X	CCV		153606	08/06/09 21:41	1.0	1	
044	218_44	X	CCB		153606	08/06/09 21:58	1.0		

JLM 08/06/09 : worked up through #16

JLM 08/10/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 7 through 44.

Analyst: JLM Date: 08/10/09 Reviewer: EAH Date: 08/10/09

Standards used: 1=S12185 2=S10785

Page 1 of 1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	265_7	X	AS14A 10X			09/22/09 09:06	1.0		
008	265_8	X	BLK			09/22/09 09:24	1.0		
009	265_9	X	BLK			09/22/09 09:41	1.0		
010	265_10	X	BLK			09/22/09 09:59	1.0		
011	265_11	CCV	L			09/22/09 10:16	1.0	1	
012	265_12	CCB/MB	QC513033	Water	155155	09/22/09 10:34	1.0		
013	265_13	LCS	QC513034	Water	155155	09/22/09 10:52	1.0	1	
014	265_14	SAMPLE	215062-001	Water	155155	09/22/09 11:11	25.0		
015	265_15	SAMPLE	215062-002	Water	155155	09/22/09 11:28	25.0		
016	265_16	SAMPLE	215069-001	Water	155155	09/22/09 11:46	1.0		
017	265_17	SAMPLE	215069-002	Water	155155	09/22/09 12:09	1.0		2:CL=33
018	265_18	SAMPLE	215069-003	Water	155155	09/22/09 12:27	1.0		2:CL=25
019	265_19	SAMPLE	215069-004	Water	155155	09/22/09 12:45	1.0		2:CL=31
020	265_20	SAMPLE	215069-005	Water	155155	09/22/09 13:02	1.0		1:CL=30
021	265_21	MSS	215072-005	Water	155155	09/22/09 13:20	25.0		
022	265_22	CCV	M		155155	09/22/09 13:37	1.0	1	
023	265_23	CCB			155155	09/22/09 13:55	1.0		
024	265_24	SAMPLE	215072-010	Water	155155	09/22/09 14:12	25.0		
025	265_25	SAMPLE	215072-011	Water	155155	09/22/09 14:30	25.0		
026	265_26	SAMPLE	215083-001	Water	155155	09/22/09 14:47	100.0		
027	265_27	SAMPLE	215083-002	Water	155155	09/22/09 15:05	25.0		
028	265_28	SAMPLE	215084-001	Water	155155	09/22/09 15:33	200.0		
029	265_29	SAMPLE	215084-002	Water	155155	09/22/09 15:50	100.0		
030	265_30	SAMPLE	215084-003	Water	155155	09/22/09 16:08	10.0		
031	265_31	SAMPLE	215100-001	Water	155155	09/22/09 16:48	1.0		2:SO4=59
032	265_32	SAMPLE	215100-002	Water	155155	09/22/09 17:06	1.0		2:SO4=59
033	265_33	SAMPLE	215100-001	Water	155155	09/22/09 17:31	5.0		
034	265_34	CCV	H		155155	09/22/09 17:48	1.0	1	
035	265_35	CCB			155155	09/22/09 18:06	1.0		
036	265_36	SAMPLE	215083-001	Water	155155	09/22/09 18:43	5.0		2:SO4=200
037	265_37	X	BLK		155155	09/22/09 19:01	1.0		
038	265_38	X	BLK		155155	09/22/09 19:18	1.0		
039	265_39	SAMPLE	215083-002	Water	155155	09/22/09 19:36	1.0		2:SO4=150
040	265_40	SAMPLE	215069-002	Water	155155	09/22/09 19:53	5.0		
041	265_41	SAMPLE	215069-003	Water	155155	09/22/09 20:11	5.0		
042	265_42	SAMPLE	215069-004	Water	155155	09/22/09 20:28	5.0		
043	265_43	SAMPLE	215062-001	Water	155155	09/22/09 20:46	5.0		2:SO4=63
044	265_44	SAMPLE	215062-002	Water	155155	09/22/09 21:03	1.0		2:SO4=130
045	265_45	MSS	215072-005	Water	155155	09/22/09 21:21	2.0		2:CL=95
046	265_46	SAMPLE	215072-010	Water	155155	09/22/09 21:38	2.0		1:CL=79
047	265_47	SAMPLE	215072-011	Water	155155	09/22/09 21:56	5.0		2:CL=53
048	265_48	CCV	M		155155	09/22/09 22:13	1.0	1	
049	265_49	CCB			155155	09/22/09 22:31	1.0		
050	265_50	X	CCV		155155	09/22/09 22:48	1.0	1	
051	265_51	X	CCB		155155	09/22/09 23:06	1.0		
052	265_52	SAMPLE	215084-001	Water	155155	09/22/09 23:23	10.0		
053	265_53	X	BLK		155155	09/22/09 23:41	1.0		
054	265_54	X	BLK		155155	09/22/09 23:58	1.0		
055	265_55	SAMPLE	215084-002	Water	155155	09/23/09 00:16	5.0		1:CL=130
056	265_56	X	BLK		155155	09/23/09 00:33	1.0		
057	265_57	X	BLK		155155	09/23/09 00:51	1.0		
058	265_58	SAMPLE	215084-003	Water	155155	09/23/09 01:08	1.0		1:CL=41

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
059	265_59	SAMPLE	215037-001	Water	155155	09/23/09 01:26	1.0		
060	265_60	SAMPLE	215037-002	Water	155155	09/23/09 01:43	1.0		
061	265_61	SAMPLE	214798-001	Water	155155	09/23/09 02:01	1.0		
062	265_62	SAMPLE	215062-001	Water	155155	09/23/09 02:18	5.0		
063	265_63	SAMPLE	215062-002	Water	155155	09/23/09 02:36	10.0		
064	265_64	MSS	215072-005	Water	155155	09/23/09 02:53	10.0		1:CL=25
065	265_65	SAMPLE	215072-010	Water	155155	09/23/09 03:11	1.0		3:CL=130
066	265_66	X	BLK		155155	09/23/09 03:28	1.0		
067	265_67	CCV	H		155155	09/23/09 03:46	1.0	1	
068	265_68	CCB			155155	09/23/09 04:03	1.0		
069	265_69	X	CCV		155155	09/23/09 04:21	1.0	1	
070	265_70	X	CCB		155155	09/23/09 04:39	1.0		
071	265_71	MS	QC513134	Water	155155	09/23/09 04:56	25.0	1	
072	265_72	MSD	QC513135	Water	155155	09/23/09 05:14	25.0	1	
073	265_73	X	QC513134		155155	09/23/09 05:31	25.0	1	
074	265_74	X	QC513135		155155	09/23/09 05:49	25.0	1	
075	265_75	SAMPLE	215072-011	Water	155155	09/23/09 06:06	1.0		3:SO4=220
076	265_76	X	BLK		155155	09/23/09 06:24	1.0		
077	265_77	SAMPLE	215083-002	Water	155155	09/23/09 06:41	10.0		
078	265_78	SAMPLE	215084-002	Water	155155	09/23/09 06:59	10.0		1:CL=80
079	265_79	SAMPLE	215100-002	Water	155155	09/23/09 07:16	5.0		
080	265_80	CCV	M		155155	09/23/09 07:34	1.0	1	
081	265_81	CCB			155155	09/23/09 07:51	1.0		
082	265_82	X	CCV		155155	09/23/09 08:09	1.0	1	
083	265_83	X	CCB		155155	09/23/09 08:26	1.0		
084	265_84	SAMPLE	215084-001	Water	155155	09/23/09 08:44	10.0		1:CL=170
085	265_85	X	BLK		155155	09/23/09 09:01	1.0		
086	265_86	X	BLK		155155	09/23/09 09:19	1.0		
087	265_87	SAMPLE	215062-001	Water	155155	09/23/09 09:36	1.0		2:SO4=63
088	265_88	MSS	215072-005	Water	155155	09/23/09 09:54	1.0		3:CL=150
089	265_89	X	BLK		155155	09/23/09 10:11	1.0		
090	265_90	CCV	H		155155	09/23/09 10:29	1.0	1	
091	265_91	CCB			155155	09/23/09 10:46	1.0		
092	265_92	BLANK	QC513289	Water	155218	09/23/09 11:11	1.0		
093	265_93	LCS	QC513290	Water	155218	09/23/09 11:28	1.0	1	
094	265_94	SAMPLE	215117-001	Water	155218	09/23/09 12:29	50.0		
095	265_95	SAMPLE	215117-002	Water	155218	09/23/09 12:46	100.0		
096	265_96	SAMPLE	215117-003	Water	155218	09/23/09 13:04	25.0		
097	265_97	SAMPLE	215117-004	Water	155218	09/23/09 13:21	10.0		
098	265_98	SAMPLE	215117-005	Water	155218	09/23/09 13:39	50.0		
099	265_99	SAMPLE	215117-003	Water	155218	09/23/09 13:56	1.0		1:CL=24
100	265_100	SAMPLE	215117-001	Water	155218	09/23/09 14:19	1.0		1:CL=130
101	265_101	X	BLK		155218	09/23/09 14:36	1.0		
102	265_102	X	BLK		155218	09/23/09 14:54	1.0		
103	265_103	SAMPLE	215117-002	Water	155218	09/23/09 15:11	5.0		1:SO4=340
104	265_104	X	BLK		155218	09/23/09 15:29	1.0		
105	265_105	X	BLK		155218	09/23/09 15:46	1.0		
106	265_106	CCV	M		155218	09/23/09 16:04	1.0	1	
107	265_107	CCB			155218	09/23/09 16:21	1.0		
108	265_108	SAMPLE	215117-004	Water	155218	09/23/09 16:49	1.0		2:SO4=200
109	265_109	X	BLK		155218	09/23/09 17:06	1.0		
110	265_110	X	BLK		155218	09/23/09 17:24	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
111	265_111	MSS	215134-005	Water	155218	09/23/09 17:42	100.0		
112	265_112	SAMPLE	215134-003	Water	155218	09/23/09 18:02	2500		
113	265_113	SAMPLE	215133-005	Water	155218	09/23/09 18:21	2000		
114	265_114	SAMPLE	215133-007	Water	155218	09/23/09 18:39	2000		
115	265_115	SAMPLE	215134-001	Water	155218	09/23/09 18:56	2000		
116	265_116	SAMPLE	215134-002	Water	155218	09/23/09 19:14	2000		
117	265_117	SAMPLE	215134-004	Water	155218	09/23/09 19:31	2500		
118	265_118	SAMPLE	215117-005	Water	155218	09/23/09 19:49	5.0		1:SO4=190
119	265_119	X	BLK		155218	09/23/09 20:06	1.0		
120	265_120	X	BLK		155218	09/23/09 20:24	1.0		
121	265_121	SAMPLE	215137-005	Water	155218	09/23/09 20:41	1.0		1:CL=22
122	265_122	X	BLK		155218	09/23/09 20:59	1.0		
123	265_123	CCV	H		155218	09/23/09 21:16	1.0	1	
124	265_124	CCB			155218	09/23/09 21:34	1.0		
125	265_125	X	CCV		155218	09/23/09 21:51	1.0	1	
126	265_126	X	CCB		155218	09/23/09 22:09	1.0		
127	265_127	SAMPLE	215134-001	Water	155218	09/23/09 22:26	100.0		1:CL=140
128	265_128	X	BLK		155218	09/23/09 22:44	1.0		
129	265_129	X	BLK		155218	09/23/09 23:01	1.0		
130	265_130	SAMPLE	215134-002	Water	155218	09/23/09 23:19	100.0		1:CL=150
131	265_131	X	BLK		155218	09/23/09 23:36	1.0		
132	265_132	X	BLK		155218	09/23/09 23:54	1.0		
133	265_133	SAMPLE	215134-003	Water	155218	09/24/09 00:11	100.0		2:CL=190
134	265_134	X	BLK		155218	09/24/09 00:29	1.0		
135	265_135	X	BLK		155218	09/24/09 00:47	1.0		
136	265_136	SAMPLE	215134-004	Water	155218	09/24/09 01:04	100.0		2:CL=180
137	265_137	X	BLK		155218	09/24/09 01:22	1.0		
138	265_138	X	BLK		155218	09/24/09 01:39	1.0		
139	265_139	SAMPLE	215133-004	Water	155218	09/24/09 01:57	100.0		1:CL=160
140	265_140	X	BLK		155218	09/24/09 02:14	1.0		
141	265_141	X	BLK		155218	09/24/09 02:32	1.0		
142	265_142	SAMPLE	215133-005	Water	155218	09/24/09 02:49	100.0		1:CL=160
143	265_143	X	BLK		155218	09/24/09 03:07	1.0		
144	265_144	X	BLK		155218	09/24/09 03:24	1.0		
145	265_145	SAMPLE	215133-006	Water	155218	09/24/09 03:42	100.0		1:CL=160
146	265_146	X	BLK		155218	09/24/09 03:59	1.0		
147	265_147	X	BLK		155218	09/24/09 04:17	1.0		
148	265_148	SAMPLE	215133-007	Water	155218	09/24/09 04:34	100.0		1:CL=170
149	265_149	X	BLK		155218	09/24/09 04:52	1.0		
150	265_150	X	BLK		155218	09/24/09 05:09	1.0		
151	265_151	MSS	215134-005	Water	155218	09/24/09 05:27	5.0		1:CL=130
152	265_152	X	BLK		155218	09/24/09 05:44	1.0		
153	265_153	X	BLK		155218	09/24/09 06:02	1.0		
154	265_154	SAMPLE	215133-004	Water	155218	09/24/09 06:19	2000		
155	265_155	CCV	M		155218	09/24/09 06:37	1.0	1	
156	265_156	CCB			155218	09/24/09 06:54	1.0		
157	265_157	X	CCV		155218	09/24/09 07:12	1.0	1	
158	265_158	X	CCB		155218	09/24/09 07:29	1.0		
159	265_159	MS	QC513406	Water	155218	09/24/09 07:47	100.0	1	
160	265_160	MSD	QC513407	Water	155218	09/24/09 08:04	100.0	1	
161	265_161	SAMPLE	215117-001	Water	155218	09/24/09 08:22	25.0		
162	265_162	SAMPLE	215117-003	Water	155218	09/24/09 08:39	2.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
163	265_163	SAMPLE	215137-005	Water	155218	09/24/09 08:57	5.0		
164	265_164	SAMPLE	215133-006	Water	155218	09/24/09 09:14	2000		
165	265_165	SAMPLE	215134-003	Water	155218	09/24/09 09:32	200.0		1:CL=120
166	265_166	X	BLK		155218	09/24/09 09:49	1.0		
167	265_167	SAMPLE	215134-004	Water	155218	09/24/09 10:07	200.0		1:CL=120
168	265_168	X	BLK		155218	09/24/09 10:24	1.0		
169	265_169	MSS	215134-005	Water	155218	09/24/09 10:42	10.0		1:CL=81
170	265_170	X	BLK		155218	09/24/09 10:59	1.0		
171	265_171	CCV	H		155218	09/24/09 11:17	1.0	1	
172	265_172	CCB/MB	QC513486	Water	155264	09/24/09 11:34	1.0		
173	265_173	LCS	QC513487	Water	155264	09/24/09 11:52	1.0	1	
174	265_174	MSS	215135-004	Water	155264	09/24/09 12:09	50.0		
175	265_175	SAMPLE	215135-006	Water	155264	09/24/09 12:27	50.0		
176	265_176	SAMPLE	215055-001	Water	155264	09/24/09 12:49	10.0		
177	265_177	SAMPLE	215055-002	Water	155264	09/24/09 13:07	50.0		
178	265_178	SAMPLE	215135-001	Water	155264	09/24/09 13:24	10.0		1:CL=25
179	265_179	SAMPLE	215135-005	Water	155264	09/24/09 13:42	50.0		
180	265_180	SAMPLE	215135-008	Water	155264	09/24/09 13:59	10.0		1:CL=27
181	265_181	SAMPLE	215135-009	Water	155264	09/24/09 14:17	50.0		
182	265_182	CCV	M		155264	09/24/09 14:34	1.0	1	
183	265_183	CCB			155264	09/24/09 14:52	1.0		
184	265_184	SAMPLE	215135-010	Water	155264	09/24/09 15:09	50.0		
185	265_185	SAMPLE	215135-007	Water	155264	09/24/09 15:27	2.0		2:SO4=220
186	265_186	X	BLK		155264	09/24/09 15:44	1.0		
187	265_187	X	BLK		155264	09/24/09 16:02	1.0		
188	265_188	MSS	215135-004	Water	155264	09/24/09 16:19	2.0		2:SO4=200
189	265_189	X	BLK		155264	09/24/09 16:37	1.0		
190	265_190	X	BLK		155264	09/24/09 16:54	1.0		
191	265_191	SAMPLE	215167-005	Water	155264	09/24/09 17:48	100.0		
192	265_192	SAMPLE	215167-007	Water	155264	09/24/09 18:05	200.0		
193	265_193	SAMPLE	215167-006	Water	155264	09/24/09 18:23	100.0		1:CL=20
194	265_194	SAMPLE	215167-008	Water	155264	09/24/09 18:41	500.0		
195	265_195	SAMPLE	215167-009	Water	155264	09/24/09 18:59	500.0		
196	265_196	SAMPLE	215168-008	Water	155264	09/24/09 19:16	1000		
197	265_197	SAMPLE	215168-007	Water	155264	09/24/09 19:34	200.0		
198	265_198	CCV	H		155264	09/24/09 19:51	1.0	1	
199	265_199	CCB			155264	09/24/09 20:09	1.0		
200	265_200	X	CCV		155264	09/24/09 20:26	1.0	1	
201	265_201	X	CCB		155264	09/24/09 20:44	1.0		
202	265_202	SAMPLE	215135-006	Water	155264	09/24/09 21:01	2.0		2:SO4=220
203	265_203	X	BLK		155264	09/24/09 21:19	1.0		
204	265_204	X	BLK		155264	09/24/09 21:36	1.0		
205	265_205	SAMPLE	215167-005	Water	155264	09/24/09 21:54	2.0		2:CL=210
206	265_206	X	BLK		155264	09/24/09 22:11	1.0		
207	265_207	X	BLK		155264	09/24/09 22:29	1.0		
208	265_208	SAMPLE	215167-007	Water	155264	09/24/09 22:46	10.0		1:CL=200
209	265_209	X	BLK		155264	09/24/09 23:04	1.0		
210	265_210	X	BLK		155264	09/24/09 23:21	1.0		
211	265_211	SAMPLE	215167-006	Water	155264	09/24/09 23:39	5.0		1:CL=210
212	265_212	X	BLK		155264	09/24/09 23:56	1.0		
213	265_213	X	BLK		155264	09/25/09 00:14	1.0		
214	265_214	SAMPLE	215167-002	Water	155264	09/25/09 00:31	5.0		1:CL=120

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
215	265_215	X	BLK		155264	09/25/09 00:49	1.0		
216	265_216	X	BLK		155264	09/25/09 01:06	1.0		
217	265_217	SAMPLE	215167-003	Water	155264	09/25/09 01:24	5.0		2:CL=130
218	265_218	X	BLK		155264	09/25/09 01:41	1.0		
219	265_219	X	BLK		155264	09/25/09 01:59	1.0		
220	265_220	SAMPLE	215167-004	Water	155264	09/25/09 02:16	5.0		1:CL=120
221	265_221	X	BLK		155264	09/25/09 02:34	1.0		
222	265_222	X	BLK		155264	09/25/09 02:52	1.0		
223	265_223	SAMPLE	215167-008	Water	155264	09/25/09 03:09	10.0		2:CL=230
224	265_224	X	BLK		155264	09/25/09 03:27	1.0		
225	265_225	X	BLK		155264	09/25/09 03:44	1.0		
226	265_226	SAMPLE	215167-009	Water	155264	09/25/09 04:02	20.0		1:CL=160
227	265_227	X	BLK		155264	09/25/09 04:19	1.0		
228	265_228	X	BLK		155264	09/25/09 04:37	1.0		
229	265_229	SAMPLE	215168-008	Water	155264	09/25/09 04:54	50.0		1:CL=160
230	265_230	X	BLK		155264	09/25/09 05:12	1.0		
231	265_231	X	BLK		155264	09/25/09 05:29	1.0		
232	265_232	CCV	M		155264	09/25/09 05:47	1.0	1	
233	265_233	CCB			155264	09/25/09 06:04	1.0		
234	265_234	X	CCV		155264	09/25/09 06:22	1.0	1	
235	265_235	X	CCB		155264	09/25/09 06:39	1.0		
236	265_236	SAMPLE	215168-007	Water	155264	09/25/09 06:57	10.0		1:CL=140
237	265_237	X	BLK		155264	09/25/09 07:14	1.0		
238	265_238	X	BLK		155264	09/25/09 07:32	1.0		
239	265_239	MS	QC513505	Water	155264	09/25/09 07:49	50.0	1	
240	265_240	MSD	QC513506	Water	155264	09/25/09 08:07	50.0	1	
241	265_241	MSS	215135-004	Water	155264	09/25/09 08:24	25.0		1:CL=24
242	265_242	SAMPLE	215135-007	Water	155264	09/25/09 08:42	50.0		
243	265_243	SAMPLE	215055-001	Water	155264	09/25/09 08:59	2.0		2:SO4=85
244	265_244	X	BLK		155264	09/25/09 09:17	1.0		
245	265_245	SAMPLE	215135-001	Water	155264	09/25/09 09:34	20.0		
246	265_246	SAMPLE	215135-005	Water	155264	09/25/09 09:52	25.0		1:CL=27
247	265_247	SAMPLE	215135-008	Water	155264	09/25/09 10:09	20.0		
248	265_248	SAMPLE	215167-002	Water	155264	09/25/09 10:27	100.0		
249	265_249	CCV	H		155264	09/25/09 10:44	1.0	1	
250	265_250	CCB			155264	09/25/09 11:02	1.0		
251	265_251	SAMPLE	215167-005	Water	155264	09/25/09 11:56	10.0		1:CL=69
252	265_252	SAMPLE	215167-003	Water	155264	09/25/09 12:14	100.0		
253	265_253	SAMPLE	215167-004	Water	155264	09/25/09 12:31	100.0		
254	265_254	SAMPLE	215167-003	Water	155264	09/25/09 12:49	10.0		1:CL=77
255	265_255	SAMPLE	215167-008	Water	155264	09/25/09 13:06	50.0		1:CL=76
256	265_256	SAMPLE	215167-006	Water	155264	09/25/09 13:24	200.0		
257	265_257	CCV	M		155264	09/25/09 13:41	1.0	1	
258	265_258	CCB			155264	09/25/09 13:59	1.0		
259	265_259	BLANK	QC513681	Water	155318	09/25/09 14:16	1.0		
260	265_260	LCS	QC513682	Water	155318	09/25/09 14:34	1.0	1	
261	265_261	MSS	215168-003	Water	155318	09/25/09 14:51	500.0		
262	265_262	SAMPLE	215168-004	Water	155318	09/25/09 15:09	500.0		
263	265_263	SAMPLE	215168-005	Water	155318	09/25/09 15:26	100.0		
264	265_264	SAMPLE	215168-006	Water	155318	09/25/09 15:44	100.0		
265	265_265	SAMPLE	215168-001	Water	155318	09/25/09 16:02	1.0		
266	265_266	SAMPLE	215168-002	Water	155318	09/25/09 16:19	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
267	265_267	SAMPLE	215168-005	Water	155318	09/25/09 16:37	5.0		1:CL=130
268	265_268	X	BLK		155318	09/25/09 16:54	1.0		
269	265_269	X	BLK		155318	09/25/09 17:12	1.0		
270	265_270	SAMPLE	215168-006	Water	155318	09/25/09 17:29	5.0		1:CL=130
271	265_271	X	BLK		155318	09/25/09 17:47	1.0		
272	265_272	X	BLK		155318	09/25/09 18:04	1.0		
273	265_273	CCV	H		155318	09/25/09 18:22	1.0	1	
274	265_274	CCB			155318	09/25/09 18:39	1.0		
275	265_275	SAMPLE	215217-002	Water	155318	09/25/09 18:57	1000		
276	265_276	SAMPLE	215217-001	Water	155318	09/25/09 19:14	500.0		
277	265_277	SAMPLE	215216-002	Water	155318	09/25/09 19:32	500.0		
278	265_278	MSS	215168-003	Water	155318	09/25/09 19:49	10.0		2:CL=200
279	265_279	X	BLK		155318	09/25/09 20:07	1.0		
280	265_280	X	BLK		155318	09/25/09 20:24	1.0		
281	265_281	SAMPLE	215168-004	Water	155318	09/25/09 20:42	20.0		1:CL=160
282	265_282	X	BLK		155318	09/25/09 20:59	1.0		
283	265_283	X	BLK		155318	09/25/09 21:17	1.0		
284	265_284	MS	QC513683	Water	155318	09/25/09 21:34	500.0	1	
285	265_285	MSD	QC513684	Water	155318	09/25/09 21:52	500.0	1	
286	265_286	X	215169-006		155318	09/25/09 22:09	20.0		
287	265_287	MSS	215168-003	Water	155318	09/25/09 22:27	50.0		1:CL=66
288	265_288	X	BLK		155318	09/25/09 22:44	1.0		
289	265_289	CCV	M		155318	09/25/09 23:02	1.0	1	
290	265_290	CCB			155318	09/25/09 23:19	1.0		
291	265_291	X	CCV		155318	09/25/09 23:37	1.0	1	
292	265_292	X	CCB		155318	09/25/09 23:54	1.0		
293	265_293	SAMPLE	215217-002	Water	155318	09/26/09 00:12	20.0		1:CL=260
294	265_294	X	BLK		155318	09/26/09 00:29	1.0		
295	265_295	X	BLK		155318	09/26/09 00:47	1.0		
296	265_296	SAMPLE	215217-001	Water	155318	09/26/09 01:04	10.0		2:SO4=320
297	265_297	X	BLK		155318	09/26/09 01:22	1.0		
298	265_298	X	BLK		155318	09/26/09 01:39	1.0		
299	265_299	SAMPLE	215216-001	Water	155318	09/26/09 01:57	10.0		1:CL=300
300	265_300	X	BLK		155318	09/26/09 02:14	1.0		
301	265_301	X	BLK		155318	09/26/09 02:32	1.0		
302	265_302	SAMPLE	215216-002	Water	155318	09/26/09 02:49	20.0		1:CL=230
303	265_303	X	BLK		155318	09/26/09 03:07	1.0		
304	265_304	X	BLK		155318	09/26/09 03:24	1.0		
305	265_305	SAMPLE	215216-003	Water	155318	09/26/09 03:42	20.0		2:SO4=240
306	265_306	X	BLK		155318	09/26/09 03:59	1.0		
307	265_307	X	BLK		155318	09/26/09 04:17	1.0		
308	265_308	SAMPLE	215216-004	Water	155318	09/26/09 04:34	10.0		2:SO4=430
309	265_309	X	BLK		155318	09/26/09 04:52	1.0		
310	265_310	X	BLK		155318	09/26/09 05:09	1.0		
311	265_311	SAMPLE	215216-005	Water	155318	09/26/09 05:27	10.0		2:SO4=390
312	265_312	X	BLK		155318	09/26/09 05:44	1.0		
313	265_313	X	BLK		155318	09/26/09 06:02	1.0		
314	265_314	SAMPLE	215216-006	Water	155318	09/26/09 06:20	10.0		2:SO4=390
315	265_315	X	BLK		155318	09/26/09 06:37	1.0		
316	265_316	X	BLK		155318	09/26/09 06:55	1.0		
317	265_317	SAMPLE	215216-007	Water	155318	09/26/09 07:12	20.0		2:CL=220
318	265_318	X	BLK		155318	09/26/09 07:30	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
319	265_319	X	BLK		155318	09/26/09 07:47	1.0		
320	265_320	SAMPLE	215216-008	Water	155318	09/26/09 08:05	20.0		1:CL=250
321	265_321	X	BLK		155318	09/26/09 08:22	1.0		
322	265_322	X	BLK		155318	09/26/09 08:40	1.0		
323	265_323	CCV	H		155318	09/26/09 08:57	1.0	1	
324	265_324	CCB			155318	09/26/09 09:15	1.0		
325	265_325	SAMPLE	215216-009	Water	155318	09/26/09 09:32	20.0		1:CL=250
326	265_326	X	BLK		155318	09/26/09 09:50	1.0		
327	265_327	X	BLK		155318	09/26/09 10:07	1.0		
328	265_328	SAMPLE	215216-010	Water	155318	09/26/09 10:25	20.0		1:CL=250
329	265_329	X	BLK		155318	09/26/09 10:42	1.0		
330	265_330	X	BLK		155318	09/26/09 11:00	1.0		
331	265_331	SAMPLE	215216-011	Water	155318	09/26/09 11:17	20.0		1:CL=230
332	265_332	X	BLK		155318	09/26/09 11:35	1.0		
333	265_333	X	BLK		155318	09/26/09 11:52	1.0		
334	265_334	SAMPLE	215216-005	Water	155318	09/26/09 12:10	500.0		
335	265_335	SAMPLE	215216-001	Water	155318	09/26/09 12:27	1000		
336	265_336	CCV	M		155318	09/26/09 12:45	1.0	1	
337	265_337	CCB			155318	09/26/09 13:02	1.0		
338	265_338	SAMPLE	215216-003	Water	155318	09/26/09 13:35	1000		
339	265_339	SAMPLE	215216-004	Water	155318	09/26/09 13:53	500.0		
340	265_340	SAMPLE	215216-006	Water	155318	09/26/09 14:10	500.0		
341	265_341	SAMPLE	215216-007	Water	155318	09/26/09 14:28	1000		
342	265_342	SAMPLE	215216-008	Water	155318	09/26/09 14:45	1000		
343	265_343	SAMPLE	215216-009	Water	155318	09/26/09 15:03	1000		
344	265_344	SAMPLE	215216-010	Water	155318	09/26/09 15:20	1000		
345	265_345	SAMPLE	215216-011	Water	155318	09/26/09 15:38	1000		
346	265_346	SAMPLE	215217-001	Water	155318	09/26/09 15:55	200.0		
347	265_347	SAMPLE	215216-003	Water	155318	09/26/09 16:13	250.0		1:CL=26
348	265_348	CCV	H		155318	09/26/09 16:30	1.0	1	
349	265_349	CCB			155318	09/26/09 16:48	1.0		
350	265_350	X	CCV		155318	09/26/09 17:05	1.0	1	
351	265_351	X	CCB		155318	09/26/09 17:23	1.0		
352	265_352	BLANK	QC513837	Water	155353	09/26/09 17:40	1.0		
353	265_353	LCS	QC513838	Water	155353	09/26/09 17:58	1.0	1	
354	265_354	SAMPLE	215166-001	Water	155353	09/26/09 18:15	50.0		
355	265_355	SAMPLE	215166-002	Water	155353	09/26/09 18:33	25.0		
356	265_356	SAMPLE	215166-003	Water	155353	09/26/09 18:50	25.0		
357	265_357	SAMPLE	215166-004	Water	155353	09/26/09 19:08	25.0		
358	265_358	SAMPLE	215166-005	Water	155353	09/26/09 19:25	25.0		
359	265_359	SAMPLE	215166-006	Water	155353	09/26/09 19:43	50.0		
360	265_360	SAMPLE	215166-007	Water	155353	09/26/09 20:00	25.0		
361	265_361	SAMPLE	215166-008	Water	155353	09/26/09 20:18	10.0		
362	265_362	CCV	M		155353	09/26/09 20:35	1.0	1	
363	265_363	CCB			155353	09/26/09 20:53	1.0		
364	265_364	X	CCV		155353	09/26/09 21:10	1.0	1	
365	265_365	X	CCB		155353	09/26/09 21:28	1.0		
366	265_366	SAMPLE	215166-009	Water	155353	09/26/09 21:45	25.0		
367	265_367	SAMPLE	215166-010	Water	155353	09/26/09 22:03	10.0		
368	265_368	MSS	215166-011	Water	155353	09/26/09 22:20	50.0		
369	265_369	SAMPLE	215166-012	Water	155353	09/26/09 22:38	25.0		
370	265_370	SAMPLE	215166-013	Water	155353	09/26/09 22:55	25.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 609382146

Instrument : IC01 Begun : 09/22/09 09:06
Method : EPA 300.0 SOP Version : ANIONS_300_rv8

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
371	265_371	SAMPLE	215166-014	Water	155353	09/26/09 23:13	25.0		
372	265_372	SAMPLE	215166-015	Water	155353	09/26/09 23:30	25.0		
373	265_373	SAMPLE	215166-001	Water	155353	09/26/09 23:48	10.0		1:CL=37
374	265_374	MS	QC513839	Water	155353	09/27/09 00:06	50.0	1	
375	265_375	MSD	QC513840	Water	155353	09/27/09 00:23	50.0	1	
376	265_376	CCV	H		155353	09/27/09 00:41	1.0	1	
377	265_377	CCB			155353	09/27/09 00:58	1.0		
378	265_378	X	CCV		155353	09/27/09 01:16	1.0	1	
379	265_379	X	CCB		155353	09/27/09 01:33	1.0		
380	265_380	SAMPLE	215166-016	Water	155353	09/27/09 01:51	1.0		
381	265_381	SAMPLE	215166-002	Water	155353	09/27/09 02:08	5.0		1:CL=22
382	265_382	SAMPLE	215166-003	Water	155353	09/27/09 02:26	5.0		2:SO4=64
383	265_383	SAMPLE	215166-004	Water	155353	09/27/09 02:43	5.0		2:SO4=56
384	265_384	SAMPLE	215166-005	Water	155353	09/27/09 03:01	5.0		1:CL=33
385	265_385	SAMPLE	215166-006	Water	155353	09/27/09 03:18	10.0		2:SO4=53
386	265_386	SAMPLE	215166-007	Water	155353	09/27/09 03:36	5.0		2:SO4=64
387	265_387	SAMPLE	215166-008	Water	155353	09/27/09 03:53	5.0		
388	265_388	SAMPLE	215166-009	Water	155353	09/27/09 04:11	5.0		2:SO4=53
389	265_389	SAMPLE	215166-010	Water	155353	09/27/09 04:28	5.0		
390	265_390	CCV	M		155353	09/27/09 04:46	1.0	1	
391	265_391	CCB			155353	09/27/09 05:03	1.0		
392	265_392	X	CCV		155353	09/27/09 05:21	1.0	1	
393	265_393	X	CCB		155353	09/27/09 05:38	1.0		
394	265_394	MSS	215166-011	Water	155353	09/27/09 05:56	10.0		
395	265_395	SAMPLE	215166-012	Water	155353	09/27/09 06:13	5.0		
396	265_396	SAMPLE	215166-013	Water	155353	09/27/09 06:31	5.0		2:SO4=68
397	265_397	SAMPLE	215166-014	Water	155353	09/27/09 06:48	5.0		1:CL=24
398	265_398	SAMPLE	215166-015	Water	155353	09/27/09 07:06	5.0		2:SO4=68
399	265_399	CCV	H		155353	09/27/09 07:23	1.0	1	
400	265_400	CCB			155353	09/27/09 07:41	1.0		
401	265_401	X	CCV		155353	09/27/09 07:58	1.0	1	
402	265_402	X	CCB		155353	09/27/09 08:16	1.0		
403	265_403	X	SHUTDOWN		155353	09/27/09 08:33	1.0		

MJB 09/23/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 11 through 91.

JLM 09/25/09 : integrated through #260

LW 09/25/09 : Sequence reviewed through file 172

JLM 09/29/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 92 through 402.

EAH 09/25/09 : Reviewed through run#258.

Analyst: MJB Date: 09/23/09 Reviewer: LW Date: 09/30/09

Standards used: 1=S12185

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 155155
Date Started: 9/22/09
Prep Chemist: MSB

BK 2918
Page 48

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	214796-001		1x	S	LOQ Study. Spiked @ 2x RL
2	215037-001 B	.17	1x		Tw/512185 MSB 9/22/09
3	↓ -002 A	.21	1x		
4	215062-001 H	1.65	1x/5x/25x		
5	↓ -002 ↓	1.67	1x/10x/25x		
6	215069-001 A	.86	1x		
7	-002	.36	1x/5x		
8	-003	.64	1x/5x		
9	-004	.52	1x/5x		
10	↓ -005 ↓	.67	1x		
11	215072-005 F	1.53	2x/10x/25x/1x		MSS
12	-010 G	1.44	1x/2x/25x		
13	↓ -011 F	2.07	1x/5x/25x		
14	215083-001 J	3.80	5x/100x		
15	↓ -002 ↓	1.76	1x/10x/25x		
16	215084-001 D	8.67	200x/10x		
17	-002	4.79	5x/10x/100x		
18	↓ -003 ↓	1.17	1x/10x		
19	215100-001 MS/MSD I	.67	1x/5x		
20	↓ -002 ↓ I	.75	1x/5x	↓	
	Blank QC 513033	N/A	1x	N/A	
	LCS 634	↓	↓	↓	
	MS 134	1.53	25x	S	
	MSD 135	↓	↓	↓	

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x JLM 9/5/09	MSB 9/22/09
BS/BSD Spiked with .2 mL of :	512185	↓
MS/MSD Spiked with .1 mL of :	512185	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na	↓	
P: OnGuard II P		
RP: OnGuard II RP	↓	
S: 0.20um/0.45um	Sartorius #16352	↓

MSB 9/22/09
Extraction Chemist / Date

Continued from page ___
Continued on page ___

9/23/09
Reviewed by / Date

Laboratory Job Number 215072

ANALYTICAL REPORT

Wet Chemistry

Matrix: Water

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	09/17/09
Units:	mg/L	Received:	09/19/09
Batch#:	155535	Analyzed:	10/01/09

Field ID: ASE-72B-9C1 Lab ID: 215072-005
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	320	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	320	6.7	

Field ID: ASE-49B-9C1 Lab ID: 215072-010
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	250	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	250	6.7	

Field ID: PZ-1B-9C1 Lab ID: 215072-011
Type: SAMPLE Diln Fac: 6.700

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	330	6.7	
Alkalinity, Carbonate	ND	6.7	
Alkalinity, Hydroxide	ND	6.7	
Alkalinity, Total as CaCO3	330	6.7	

Type: BLANK Diln Fac: 1.000
Lab ID: QC514592

Analyte	Result	RL	ADEQ Flags
Alkalinity, Bicarbonate	ND	1.0	
Alkalinity, Carbonate	ND	1.0	
Alkalinity, Hydroxide	ND	1.0	
Alkalinity, Total as CaCO3	ND	1.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	4.000
Lab ID:	QC514593	Batch#:	155535
Matrix:	Water	Analyzed:	10/01/09

Spiked	Result	%REC	Limits	ADEQ Flags
200.0	192.4	96	90-100	

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	215072	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	METHOD
Project#:	371016.SH.60.61.QS	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	4.000
Field ID:	ZZZZZZZZZZ	Batch#:	155535
MSS Lab ID:	215023-001	Sampled:	09/18/09
Matrix:	Water	Received:	09/18/09
Units:	mg/L	Analyzed:	10/01/09

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
MS	QC514594	680.0	200.0	870.8	95	80-120			
MSD	QC514595		200.0	867.2	94	80-120	0	25	

RPD= Relative Percent Difference

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 155535
Date Started: 01-OCT-2009
Batched by : Shu Ting Liu

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
215023-001			CH2M Hill Construc	Water	ALKALINITY	30-SEP-2009
215072-005			CH2M Hill	Water	ALKALINITY	01-OCT-2009
215072-010			CH2M Hill	Water	ALKALINITY	01-OCT-2009
215072-011			CH2M Hill	Water	ALKALINITY	01-OCT-2009
215136-001			LFR Levine Fricke	Water	ALKALINITY	29-SEP-2009
215136-002			LFR Levine Fricke	Water	ALKALINITY	29-SEP-2009
215136-003			LFR Levine Fricke	Water	ALKALINITY	29-SEP-2009
215136-004			LFR Levine Fricke	Water	ALKALINITY	29-SEP-2009
215136-005			LFR Levine Fricke	Water	ALKALINITY	29-SEP-2009
215137-001			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-003			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-005			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-007			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-008			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-009			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-011			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215137-012			PES Environmental,	Water	ALKALINITY	29-SEP-2009
215217-001			Battelle Environme	Water	ALKALINITY	01-OCT-2009
215217-002			Battelle Environme	Water	ALKALINITY	01-OCT-2009
QC514592	BLANK			Water	ALKALINITY	
QC514593	LCS			Water	ALKALINITY	
QC514594	MS	of 215023-001		Water	ALKALINITY	
QC514595	MSD	of 215023-001		Water	ALKALINITY	

Analysis: **Alkalinity**
Method: **EPA 310.1 / SMWW 2320B**
SOP#: **Alkalinity_rv 8.doc**

Analyst: STL
Analysis Date: **10/01/09**
Batch No: **155535**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

SAMPLE & BATCH QC	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinty as $CaCO_3$ (mg/L)	Low Alkalinity (pH 4.5 - 4.2) Volume (mL)	Low Alkalinity as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)	% Rec.	% RPD
MB	6.2	100	0.00	0.03	ND			1.0		
LCS	10.1	25	2.18	4.81	192.40			4.0	96	
215023-001	7.4	15	0.00	10.20	680.00		n/a	6.7		
MS	8.5	25	0.98	21.77	870.80			4.0	95	
MSD	8.5	25	1.01	21.68	867.20			4.0	94	0
215023-001	7.4	15	0.00	10.20	680.00		n/a	6.7		
215072-005	7.3	15	0.00	4.77	318.00		n/a	6.7		
215072-010	7.4	15	0.00	3.80	253.33		n/a	6.7		
215072-011	7.3	15	0.00	4.89	326.00		n/a	6.7		
215136-001	7.4	15	0.00	3.48	232.00		n/a	6.7		
215136-002	6.9	15	0.00	10.84	722.67		n/a	6.7		
215136-003	7.0	15	0.00	3.25	216.67		n/a	6.7		
215136-004	7.1	15	0.00	2.71	180.67		n/a	6.7		
215136-005	7.3	15	0.00	7.89	526.00		n/a	6.7		
215137-001	7.3	15	0.00	5.17	344.67		n/a	6.7		
215137-003	7.2	15	0.00	5.85	390.00		n/a	6.7		
215137-005	7.1	15	0.00	6.11	407.33		n/a	6.7		
215137-007	6.9	15	0.00	5.79	386.00		n/a	6.7		
215137-008	7.0	15	0.00	9.30	620.00		n/a	6.7		
215137-009	7.0	15	0.00	10.77	718.00		n/a	6.7		
215137-011	7.3	15	0.00	5.60	373.33		n/a	6.7		
215137-012	7.2	25	0.00	8.95	358.00		n/a	4.0		
215217-001	5.2	50	0.00	3.03	60.60		n/a	2.0		
215217-002	7.1	15	0.00	33.57	2238.00		n/a	6.7		

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: _____

Curtis Tompkins, Ltd.

Template: F:\inorgan\wetstuff\alkalinity.xls
Ver.8.8, Effective 1/28/08

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: STL
Analysis Date: 10/01/09
Batch No: 155535

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
215023-001	0.0	680.00	680.000	680.000	0.000	0.000
215072-005	0.0	318.00	318.000	318.000	0.000	0.000
215072-010	0.0	253.33	253.333	253.333	0.000	0.000
215072-011	0.0	326.00	326.000	326.000	0.000	0.000
215136-001	0.0	232.00	232.000	232.000	0.000	0.000
215136-002	0.0	722.67	722.667	722.667	0.000	0.000
215136-003	0.0	216.67	216.667	216.667	0.000	0.000
215136-004	0.0	180.67	180.667	180.667	0.000	0.000
215136-005	0.0	526.00	526.000	526.000	0.000	0.000
215137-001	0.0	344.67	344.667	344.667	0.000	0.000
215137-003	0.0	390.00	390.000	390.000	0.000	0.000
215137-005	0.0	407.33	407.333	407.333	0.000	0.000
215137-007	0.0	386.00	386.000	386.000	0.000	0.000
215137-008	0.0	620.00	620.000	620.000	0.000	0.000
215137-009	0.0	718.00	718.000	718.000	0.000	0.000
215137-011	0.0	373.33	373.333	373.333	0.000	0.000
215137-012	0.0	358.00	358.000	358.000	0.000	0.000
215217-001	0.0	60.60	60.600	60.600	0.000	0.000
215217-002	0.0	2238.00	2238.000	2238.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 10/01/09 H_2SO_4 Normality = 0.02
Method: **EPA 310.1** Batch No: 155535 Analyst: STL

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
215023-001	680.000	829.088	0.000	0.000
215072-005	318.000	387.721	0.000	0.000
215072-010	253.333	308.876	0.000	0.000
215072-011	326.000	397.475	0.000	0.000
215136-001	232.000	282.865	0.000	0.000
215136-002	722.667	881.109	0.000	0.000
215136-003	216.667	264.170	0.000	0.000
215136-004	180.667	220.277	0.000	0.000
215136-005	526.000	641.324	0.000	0.000
215137-001	344.667	420.234	0.000	0.000
215137-003	390.000	475.506	0.000	0.000
215137-005	407.333	496.640	0.000	0.000
215137-007	386.000	470.629	0.000	0.000
215137-008	620.000	755.933	0.000	0.000
215137-009	718.000	875.419	0.000	0.000
215137-011	373.333	455.186	0.000	0.000
215137-012	358.000	436.490	0.000	0.000
215217-001	60.600	73.886	0.000	0.000
215217-002	2238.000	2728.675	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B **Curtis & Tompkins, Ltd.**

LIMS Batch #: 155535 Date: 10/1/09 **Benchbook#: BK2922**
Matrix: Water Time: 11:35 **Page: 18**

CAL-ph 4.0: LIMS#: 511916
CAL-ph 7.0: LIMS#: 59872
CAL-ph 10.0: LIMS#: 512189
Slope (limits 92 - 102): 101.3

NaCO3 Vol Spiked (mL): 5
NaCO3 Std Conc (mg/L): 1000
NaCO3 LIMS#: 512146
H_2SO_4 Normality: 0.0200
H_2SO_4 Reagent ID: RICCA-1906170

Sample #	Container ID		Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB			6.2	100	—	0.03		
LCS			10.1	25	2.18	4.81		
15023-001	A		7.4	15	—	10.20		
MS-001	↓		8.5	25	0.98	21.77		
MSD-001	↓		8.5	25	1.01	21.68		
5072-005	G		7.3	15	—	4.77		
-010	F		7.4	15	—	3.80		
-011	G		7.3	15	—	4.89		
1936-001	H		7.4	15	—	3.48		
-002	H		6.9	15	—	10.84		
-003	H		7.0	15	—	3.25		
-004	H		7.1	15	—	2.71		
-005	H		7.3	15	—	7.89		
5137-001	H		7.3	15	—	5.17		
-003	H		7.2	15	—	5.85		
-005	H		7.1	15	—	6.11		
-007	H		6.9	15	—	5.79		
-008	H		7.0	15	—	9.30		
-009	H		7.0	15	—	10.77		
-011	H		7.3	15	—	5.60		
-012	H		7.2	25	—	8.95		
5217-001	D		5.2	50	—	3.03		
-002	D		7.1	15	—	33.57		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

SM 10/1/09
Analyst / Date

10/1/09
Reviewed by / Date

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Bernice Kidd

Project: Honeywell, Sky Harbor Annual
[none]

Sampled: 09/15/09
Received: 09/16/09
Issued: 09/27/09 10:02

NELAP #01108CA Arizona DHS#AZ0671

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, on ice and with chain of custody documentation.

HOLDING TIMES: Not all holding times were met. Results were qualified where the sample analysis did not occur within method specified holding time requirements.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers. The project specific analytical batch quality control (QC) acceptance criteria in use at the TestAmerica Irvine laboratory used for this project may differ from those in the project-specific QAPP. Laboratory QC acceptance criteria were used to demonstrate accuracy and precision.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

ADDITIONAL INFORMATION: N1-SM3500 ferrous iron-The holding time for this test is immediate. The laboratory measurement, therefore, cannot be used for compliance purposes.

LABORATORY ID	CLIENT ID	MATRIX
ISI1338-01	TB-091509 B	Water
ISI1338-02	ASE-23B-9C1	Water
ISI1338-03	PL-201A-9C1	Water

TestAmerica Irvine

Debby Wilson
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

CH2M Hill-Tempe 2625 South Plaza Dr, Suite 300 Tempe, AZ 85282 Attention: Bernice Kidd	Project ID: Honeywell, Sky Harbor Annual [none] Report Number: ISI1338	Sampled: 09/15/09 Received: 09/16/09

LABORATORY ID	CLIENT ID	MATRIX
ISI1338-04	ASE-65A-9C1	Water
ISI1338-05	ASE-22B-9C1	Water

Reviewed By:

Debby Wilson

TestAmerica Irvine

Debby Wilson
Project Manager

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17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Bernice Kidd

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1338

Sampled: 09/15/09
Received: 09/16/09

DISSOLVED GASES BY HEADSPACE EQUILIBRIUM (RSK-175 MOD.)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1338-01 (TB-091509 B - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1338-02 (ASE-23B-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1338-03 (PL-201A-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	**0.75**	1	9/19/2009	9/19/2009	
Sample ID: ISI1338-04 (ASE-65A-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1338-05 (ASE-22B-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	

TestAmerica Irvine

Debby Wilson
Project Manager

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

METALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1338-02 (ASE-23B-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**19**	1	9/17/2009	9/19/2009	M3
Sample ID: ISI1338-03 (PL-201A-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**13**	1	9/17/2009	9/19/2009	
Sample ID: ISI1338-04 (ASE-65A-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**12**	1	9/17/2009	9/19/2009	
Sample ID: ISI1338-05 (ASE-22B-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**14**	1	9/17/2009	9/19/2009	

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Project Manager

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Bernice Kidd

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1338

Sampled: 09/15/09
Received: 09/16/09

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1338-02 (ASE-23B-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	**0.20**	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I18006	10	**930**	1	9/18/2009	9/18/2009	
Total Organic Carbon	SM5310B	9I17001	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1338-03 (PL-201A-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	**0.10**	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I18006	10	**1100**	1	9/18/2009	9/18/2009	
Total Organic Carbon	SM5310B	9I17001	1.0	**3.7**	1	9/17/2009	9/17/2009	
Sample ID: ISI1338-04 (ASE-65A-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I18006	10	**880**	1	9/18/2009	9/18/2009	
Total Organic Carbon	SM5310B	9I17001	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1338-05 (ASE-22B-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I18006	10	**1100**	1	9/18/2009	9/18/2009	
Total Organic Carbon	SM5310B	9I17001	1.0	ND	1	9/17/2009	9/17/2009	

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Project Manager

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: ASE-23B-9C1 (ISI1338-02) - Water					
SM 3500-Fe D	1	09/15/2009 03:00	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: PL-201A-9C1 (ISI1338-03) - Water					
SM 3500-Fe D	1	09/15/2009 03:39	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: ASE-65A-9C1 (ISI1338-04) - Water					
SM 3500-Fe D	1	09/15/2009 04:27	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: ASE-22B-9C1 (ISI1338-05) - Water					
SM 3500-Fe D	1	09/15/2009 05:12	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

METHOD BLANK/QC DATA

DISSOLVED GASES BY HEADSPACE EQUILIBRIUM (RSK-175 MOD.)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I19001 Extracted: 09/19/09										
Blank Analyzed: 09/19/2009 (9I19001-BLK1)										
Ethane	ND	0.0010	mg/l							
Ethylene	ND	0.0010	mg/l							
Methane	ND	0.0010	mg/l							
LCS Analyzed: 09/19/2009 (9I19001-BS1)										
Ethane	0.0270	0.0010	mg/l	0.0258		105	80-120			
Ethylene	0.0256	0.0010	mg/l	0.0240		107	80-120			
Methane	0.0140	0.0010	mg/l	0.0136		102	80-120			
Duplicate Analyzed: 09/19/2009 (9I19001-DUP1)					**Source: ISI1377-04**					
Ethane	ND	0.0010	mg/l		ND				25	
Ethylene	ND	0.0010	mg/l		ND				25	
Methane	0.00473	0.0010	mg/l		0.00398			17	25	

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I17044 Extracted: 09/17/09										
Blank Analyzed: 09/19/2009 (9I17044-BLK1)										
Silicon	ND	0.050	mg/l							
LCS Analyzed: 09/19/2009 (9I17044-BS1)										
Silicon	2.39	0.050	mg/l	2.50		95	85-115			
Matrix Spike Analyzed: 09/19/2009 (9I17044-MS1)					**Source: ISI1338-02**					
Silicon	25.0	0.050	mg/l	2.50	19.3	225	70-130			*M3*
Matrix Spike Analyzed: 09/19/2009 (9I17044-MS2)					**Source: ISI1341-08**					
Silicon	13.3	0.050	mg/l	2.50	10.8	103	70-130			*M3*
Matrix Spike Dup Analyzed: 09/19/2009 (9I17044-MSD1)					**Source: ISI1338-02**					
Silicon	25.8	0.050	mg/l	2.50	19.3	258	70-130	3	20	*M3*

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I17001 Extracted: 09/17/09										
Blank Analyzed: 09/17/2009 (9I17001-BLK1)										
Total Organic Carbon	ND	1.0	mg/l							
LCS Analyzed: 09/17/2009 (9I17001-BS1)										
Total Organic Carbon	9.81	1.0	mg/l	10.0		98	90-110			
Matrix Spike Analyzed: 09/17/2009 (9I17001-MS1)					**Source: ISI1139-08**					
Total Organic Carbon	9.73	1.0	mg/l	5.00	4.79	99	80-120			
Matrix Spike Dup Analyzed: 09/17/2009 (9I17001-MSD1)					**Source: ISI1139-08**					
Total Organic Carbon	9.86	1.0	mg/l	5.00	4.79	102	80-120	1	20	
Batch: 9I17045 Extracted: 09/17/09										
Blank Analyzed: 09/17/2009 (9I17045-BLK1)										
Ferrous Iron	ND	0.10	mg/l							*N1*
LCS Analyzed: 09/17/2009 (9I17045-BS1)										
Ferrous Iron	5.00	0.10	mg/l	5.00		100	80-120			*N1*
Duplicate Analyzed: 09/17/2009 (9I17045-DUP1)					**Source: ISI1320-01**					
Ferrous Iron	ND	0.10	mg/l		ND				20	*N1*
Duplicate Analyzed: 09/17/2009 (9I17045-DUP2)					**Source: ISI1341-08**					
Ferrous Iron	ND	0.10	mg/l		ND				20	*N1*
Batch: 9I18006 Extracted: 09/18/09										
Blank Analyzed: 09/18/2009 (9I18006-BLK1)										
Total Dissolved Solids	ND	10	mg/l							

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I18006 Extracted: 09/18/09										
LCS Analyzed: 09/18/2009 (9I18006-BS1)										
Total Dissolved Solids	996	10	mg/l	1000		100	90-110			
Duplicate Analyzed: 09/18/2009 (9I18006-DUP1)					**Source: ISI1200-04**					
Total Dissolved Solids	2940	10	mg/l		2840			3	10	
Batch: 9I18084 Extracted: 09/18/09										
Blank Analyzed: 09/18/2009 (9I18084-BLK1)										
Chemical Oxygen Demand	ND	20	mg/l							
LCS Analyzed: 09/18/2009 (9I18084-BS1)										
Chemical Oxygen Demand	202	20	mg/l	200		101	90-110			
Duplicate Analyzed: 09/18/2009 (9I18084-DUP1)					**Source: ISI1524-01**					
Chemical Oxygen Demand	284	40	mg/l		310			9	15	
Matrix Spike Analyzed: 09/18/2009 (9I18084-MS1)					**Source: ISI1338-02**					
Chemical Oxygen Demand	199	20	mg/l	200	ND	99	70-120			
Matrix Spike Analyzed: 09/18/2009 (9I18084-MS2)					**Source: ISI1363-01**					
Chemical Oxygen Demand	404	20	mg/l	200	205	99	70-120			
Matrix Spike Dup Analyzed: 09/18/2009 (9I18084-MSD1)					**Source: ISI1338-02**					
Chemical Oxygen Demand	205	20	mg/l	200	ND	103	70-120	3	15	

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

DATA QUALIFIERS AND DEFINITIONS

M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
N1	See case narrative.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1338	Received: 09/16/09
Attention: Bernice Kidd			

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	Arizona
EPA 200.7	Water	X	X
EPA 410.4	Water	X	X
RSK-175 MOD.	Water	N/A	N/A
SM 3500-Fe D	Water	N/A	N/A
SM2540C	Water	X	
SM5310B	Water	X	

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

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Debby Wilson
Project Manager

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ISI 1338

Test America - Irvine	Honeywell	Chain Of Custody / Analysis Request	AESI Ref:	40060.70670
17461 Derian, Suite 100 Irvine, CA 92614 (949) 261-1022			COC#	37380
	Privileged & Confidential	Site Name: Sky Harbor / Phase:	Lab Proj # (SDG):	
Sampling Co.: H+A	EDD To: Jennifer Peterson, jennifer.Peterson@ch2m.com	Location of Site: Phoenix, AZ / Sampling Program: Quarterly UST	Lab ID	TAMI
Client Contact: (name, co., address)	Sampler: M. Weise - D. Foehr - M. Hall		Site ID	SKYHARBOR
CH2M HILL	PO # 5101516	Preservative	Lab Job #	
2625 South Plaza Drive, Suite 300	Analysis Turnaround Time (TAT): 14		Authorized User:	Honeywell
Tempe, AZ 85282	Consultant			
Preliminary Data To: Jennifer Peterson, CH2M HILL			Text & Excel File Drive	Excel & Text File Order
Sample Receipt Acknowledgement To: Jennifer Peterson, CH2M HILL				
Hard Copy To: Jennifer Peterson, CH2M HILL	Full Report TAT: 14			
Invoice To: Honeywell/Copy J Peterson				

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	Methane, Ethane, Ethene (RSK-175)	Ferrous Iron (SM3500D)	TDS (SM2540C)	TOC (SM5310B)	COD (E410.4)	Silicon (E200.7)	MS/MSD	Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units										
1	TB	--	--	TB-091509 B	9/15/9	0210				1	--	-	X								
2	ASE-23B	--	208	ASE-23B-9C1	9/15/9	0300				6	G	N	X	X	X	X	X	X			
3	PL-201A	--	78	PL-201A-9C1	9/15/9	0339				6	G	N	X	X	X	X	X	X			
4	ASE-65A	--	97	ASE-65A-9C1	9/15/9	0427				6	G	N	X	X	X	X	X	X			
5	ASE-22B	--	141	ASE-22B-9C1	9/15/9	0512				6	G	N	X	X	X	X	X	X			
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	H+A		Fed Ex		
	Date/Time 09/15/09 1530		Date/Time 09/15/09 1530	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time	Vu Bank	Date/Time 9/16/09 8:30	Cooler Temp. 4.5	Yes

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

#002

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Jennifer Peterson

Project: Honeywell, Sky Harbor Annual
[none]

Sampled: 09/15/09
Received: 09/16/09
Issued: 09/27/09 09:53

NELAP #01108CA Arizona DHS#AZ0671

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, on ice and with chain of custody documentation.

HOLDING TIMES: Not all holding times were met. Results were qualified where the sample analysis did not occur within method specified holding time requirements.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.The project specific analytical batch quality control (QC) acceptance criteria in use at the TestAmerica Irvine laboratory used for this project may differ from those in the project-specific QAPP. Laboratory QC acceptance criteria were used to demonstrate accuracy and precision.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

ADDITIONAL INFORMATION: N1-SM3500-Ferrous iron:The holding time for this test is immediate. The laboratory measurement, therefore, cannot be used for compliance purposes.

LABORATORY ID	CLIENT ID	MATRIX
ISI1341-02	ASE-60A-9C1	Water
ISI1341-03	ASE-73A-9C1	Water
ISI1341-04	ASE-85A-9C1	Water
ISI1341-05	BC-17-9C1	Water
ISI1341-06	ASE-70A-9C1	Water

TestAmerica Irvine

Debby Wilson
Project Manager

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CH2M Hill-Tempe 2625 South Plaza Dr, Suite 300 Tempe, AZ 85282 Attention: Jennifer Peterson	Project ID: Honeywell, Sky Harbor Annual [none] Report Number: ISI1341	Sampled: 09/15/09 Received: 09/16/09

LABORATORY ID	CLIENT ID	MATRIX
ISI1341-07	PL-520-9C1	Water
ISI1341-08	ASE-76B-9C1	Water

Reviewed By:

Debby Wilson

TestAmerica Irvine

Debby Wilson
Project Manager

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CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Jennifer Peterson

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1341

Sampled: 09/15/09
Received: 09/16/09

DISSOLVED GASES BY HEADSPACE EQUILIBRIUM (RSK-175 MOD.)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1341-02 (ASE-60A-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1341-03 (ASE-73A-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1341-04 (ASE-85A-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1341-05 (BC-17-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1341-06 (ASE-70A-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1341-07 (PL-520-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Sample ID: ISI1341-08 (ASE-76B-9C1 - Water)								
Reporting Units: mg/l								
Ethane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Ethylene	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	
Methane	RSK-175 MOD.	9I19001	0.0010	ND	1	9/19/2009	9/19/2009	

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CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Jennifer Peterson

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1341

Sampled: 09/15/09
Received: 09/16/09

METALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1341-02 (ASE-60A-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**11**	1	9/17/2009	9/19/2009	
Sample ID: ISI1341-03 (ASE-73A-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**13**	1	9/17/2009	9/19/2009	
Sample ID: ISI1341-04 (ASE-85A-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**13**	1	9/17/2009	9/19/2009	
Sample ID: ISI1341-05 (BC-17-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**12**	1	9/17/2009	9/19/2009	
Sample ID: ISI1341-06 (ASE-70A-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**12**	1	9/17/2009	9/19/2009	
Sample ID: ISI1341-07 (PL-520-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**11**	1	9/17/2009	9/19/2009	
Sample ID: ISI1341-08 (ASE-76B-9C1 - Water)								
Reporting Units: mg/l								
Silicon	EPA 200.7	9I17044	0.050	**11**	1	9/17/2009	9/19/2009	M3

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Project Manager

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Tempe, AZ 85282
Attention: Jennifer Peterson

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1341

Sampled: 09/15/09
Received: 09/16/09

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1341-02 (ASE-60A-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I18006	10	**730**	1	9/18/2009	9/18/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1341-03 (ASE-73A-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I21066	10	**890**	1	9/21/2009	9/21/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1341-04 (ASE-85A-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I21066	10	**940**	1	9/21/2009	9/21/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1341-05 (BC-17-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I21066	10	**860**	1	9/21/2009	9/21/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1341-06 (ASE-70A-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I21066	10	**920**	1	9/21/2009	9/21/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	
Sample ID: ISI1341-07 (PL-520-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I21066	10	**910**	1	9/21/2009	9/21/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	

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CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Jennifer Peterson

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1341

Sampled: 09/15/09
Received: 09/16/09

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISI1341-08 (ASE-76B-9C1 - Water)								
Reporting Units: mg/l								
Ferrous Iron	SM 3500-Fe D	9I17045	0.10	ND	1	9/17/2009	9/17/2009	N1
Chemical Oxygen Demand	EPA 410.4	9I18084	20	ND	1	9/18/2009	9/18/2009	
Total Dissolved Solids	SM2540C	9I21066	10	**1000**	1	9/21/2009	9/21/2009	
Total Organic Carbon	SM5310B	9I17002	1.0	ND	1	9/17/2009	9/17/2009	

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CH2M Hill-Tempe
2625 South Plaza Dr, Suite 300
Tempe, AZ 85282
Attention: Jennifer Peterson

Project ID: Honeywell, Sky Harbor Annual
[none]
Report Number: ISI1341

Sampled: 09/15/09
Received: 09/16/09

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: ASE-60A-9C1 (ISI1341-02) - Water					
SM 3500-Fe D	1	09/15/2009 05:52	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: ASE-73A-9C1 (ISI1341-03) - Water					
SM 3500-Fe D	1	09/15/2009 06:48	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: ASE-85A-9C1 (ISI1341-04) - Water					
SM 3500-Fe D	1	09/15/2009 07:50	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: BC-17-9C1 (ISI1341-05) - Water					
SM 3500-Fe D	1	09/15/2009 09:05	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: ASE-70A-9C1 (ISI1341-06) - Water					
SM 3500-Fe D	1	09/15/2009 09:57	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: PL-520-9C1 (ISI1341-07) - Water					
SM 3500-Fe D	1	09/15/2009 10:07	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20
Sample ID: ASE-76B-9C1 (ISI1341-08) - Water					
SM 3500-Fe D	1	09/15/2009 12:33	09/16/2009 12:30	09/17/2009 09:20	09/17/2009 09:20

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

METHOD BLANK/QC DATA

DISSOLVED GASES BY HEADSPACE EQUILIBRIUM (RSK-175 MOD.)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I19001 Extracted: 09/19/09										
Blank Analyzed: 09/19/2009 (9I19001-BLK1)										
Ethane	ND	0.0010	mg/l							
Ethylene	ND	0.0010	mg/l							
Methane	ND	0.0010	mg/l							
LCS Analyzed: 09/19/2009 (9I19001-BS1)										
Ethane	0.0270	0.0010	mg/l	0.0258		105	80-120			
Ethylene	0.0256	0.0010	mg/l	0.0240		107	80-120			
Methane	0.0140	0.0010	mg/l	0.0136		102	80-120			
Duplicate Analyzed: 09/19/2009 (9I19001-DUP1)					**Source: ISI1377-04**					
Ethane	ND	0.0010	mg/l		ND				25	
Ethylene	ND	0.0010	mg/l		ND				25	
Methane	0.00473	0.0010	mg/l		0.00398			17	25	

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I17044 Extracted: 09/17/09										
Blank Analyzed: 09/19/2009 (9I17044-BLK1)										
Silicon	ND	0.050	mg/l							
LCS Analyzed: 09/19/2009 (9I17044-BS1)										
Silicon	2.39	0.050	mg/l	2.50		95	85-115			
Matrix Spike Analyzed: 09/19/2009 (9I17044-MS1)					**Source: ISI1338-02**					
Silicon	25.0	0.050	mg/l	2.50	19.3	225	70-130			*M3*
Matrix Spike Analyzed: 09/19/2009 (9I17044-MS2)					**Source: ISI1341-08**					
Silicon	13.3	0.050	mg/l	2.50	10.8	103	70-130			*M3*
Matrix Spike Dup Analyzed: 09/19/2009 (9I17044-MSD1)					**Source: ISI1338-02**					
Silicon	25.8	0.050	mg/l	2.50	19.3	258	70-130	3	20	*M3*

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I17002 Extracted: 09/17/09										
Blank Analyzed: 09/17/2009 (9I17002-BLK1)										
Total Organic Carbon	ND	1.0	mg/l							
LCS Analyzed: 09/17/2009 (9I17002-BS1)										
Total Organic Carbon	10.5	1.0	mg/l	10.0		105	90-110			
Matrix Spike Analyzed: 09/17/2009 (9I17002-MS1)					**Source: ISI1284-07**					
Total Organic Carbon	5.20	1.0	mg/l	5.00	ND	104	80-120			
Matrix Spike Dup Analyzed: 09/17/2009 (9I17002-MSD1)					**Source: ISI1284-07**					
Total Organic Carbon	5.09	1.0	mg/l	5.00	ND	102	80-120	2	20	
Batch: 9I17045 Extracted: 09/17/09										
Blank Analyzed: 09/17/2009 (9I17045-BLK1)										
Ferrous Iron	ND	0.10	mg/l							*N1*
LCS Analyzed: 09/17/2009 (9I17045-BS1)										
Ferrous Iron	5.00	0.10	mg/l	5.00		100	80-120			*N1*
Duplicate Analyzed: 09/17/2009 (9I17045-DUP1)					**Source: ISI1320-01**					
Ferrous Iron	ND	0.10	mg/l		ND				20	*N1*
Duplicate Analyzed: 09/17/2009 (9I17045-DUP2)					**Source: ISI1341-08**					
Ferrous Iron	ND	0.10	mg/l		ND				20	*N1*
Batch: 9I18006 Extracted: 09/18/09										
Blank Analyzed: 09/18/2009 (9I18006-BLK1)										
Total Dissolved Solids	ND	10	mg/l							

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I18006 Extracted: 09/18/09										
LCS Analyzed: 09/18/2009 (9I18006-BS1)										
Total Dissolved Solids	996	10	mg/l	1000		100	90-110			
Duplicate Analyzed: 09/18/2009 (9I18006-DUP1)					**Source: ISI1200-04**					
Total Dissolved Solids	2940	10	mg/l		2840			3	10	
Batch: 9I18084 Extracted: 09/18/09										
Blank Analyzed: 09/18/2009 (9I18084-BLK1)										
Chemical Oxygen Demand	ND	20	mg/l							
LCS Analyzed: 09/18/2009 (9I18084-BS1)										
Chemical Oxygen Demand	202	20	mg/l	200		101	90-110			
Duplicate Analyzed: 09/18/2009 (9I18084-DUP1)					**Source: ISI1524-01**					
Chemical Oxygen Demand	284	40	mg/l		310			9	15	
Matrix Spike Analyzed: 09/18/2009 (9I18084-MS1)					**Source: ISI1338-02**					
Chemical Oxygen Demand	199	20	mg/l	200	ND	99	70-120			
Matrix Spike Analyzed: 09/18/2009 (9I18084-MS2)					**Source: ISI1363-01**					
Chemical Oxygen Demand	404	20	mg/l	200	205	99	70-120			
Matrix Spike Dup Analyzed: 09/18/2009 (9I18084-MSD1)					**Source: ISI1338-02**					
Chemical Oxygen Demand	205	20	mg/l	200	ND	103	70-120	3	15	
Batch: 9I21066 Extracted: 09/21/09										
Blank Analyzed: 09/21/2009 (9I21066-BLK1)										
Total Dissolved Solids	ND	10	mg/l							

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9I21066 Extracted: 09/21/09										
LCS Analyzed: 09/21/2009 (9I21066-BS1)										
Total Dissolved Solids	1010	10	mg/l	1000		101	90-110			
Duplicate Analyzed: 09/21/2009 (9I21066-DUP1)					**Source: ISI1341-03**					
Total Dissolved Solids	891	10	mg/l		887			0	10	

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

DATA QUALIFIERS AND DEFINITIONS

M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
N1	See case narrative.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

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CH2M Hill-Tempe	Project ID:	Honeywell, Sky Harbor Annual	
2625 South Plaza Dr, Suite 300		[none]	Sampled: 09/15/09
Tempe, AZ 85282	Report Number:	ISI1341	Received: 09/16/09
Attention: Jennifer Peterson			

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	Arizona
EPA 200.7	Water	X	X
EPA 410.4	Water	X	X
RSK-175 MOD.	Water	N/A	N/A
SM 3500-Fe D	Water	N/A	N/A
SM2540C	Water	X	
SM5310B	Water	X	

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IS I1341

Test America - Irvine
17461 Derian, Suite 100
Irvine, CA 92614
(949) 261-1022

Honeywell Chain Of Custody / Analysis Request

AESI Ref:	40060.70670		
COC#	37380		
Lab Proj # (SDG):			
Lab ID	TAMI		
Site ID	SKYHARBOR		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Privileged & Confidential

Site Name:	Sky Harbor	Phase:	
Location of Site:	Phoenix, AZ	Sampling Program	Quarterly UST

Sampling Co.:	H+A
EDD To:	Jennifer Peterson, jennifer.Peterson@ch2m.com
Client Contact: (name, co., address)	
CH2M HILL	
2625 South Plaza Drive, Suite 300	
Tempe, AZ 85282	
Preliminary Data To	Jennifer Peterson, CH2M HILL
Sample Receipt Acknowledgement To	Jennifer Peterson, CH2M HILL
Hard Copy To	Jennifer Peterson, CH2M HILL
Invoice To:	Honeywell/Copy J Peterson
Sampler:	M. Weise - D. Foehr - J Yentes
PO #	5101516
Analysis Turnaround Time (TAT):	14
Consultant	
Full Report TAT:	14

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	Methane, Ethane, Ethene (RSK-175)	Ferrous Iron (SM3500D)	TDS (SM2540C)	TOC (SM5310B)	COD (E410.4)	Silicon (E200.7)	MS/MSD	Sampling Method (code)	Lab Sample Numbers
											Units										
1				~~TB-091509A~~ TR-091509A	9.15.09																
1				~~TB-091509A~~	~~9.15.09~~	0500				1											
2				ASE-60A-9C1		0552				7			X	X	X	X	X	X			
3				ASE-73A-9C1		0648				7			X	X	X	X	X	X			
4				ASE-85A-9C1		0750				7			X	X	X	X	X	X			
5				BC-17-9C1		0905				7			X	X	X	X	X	X			
6				ASE-70A-9C1		0957				7			X	X	X	X	X	X			
7				PL-520-9C1		1007				7			X	X	X	X	X	X			
8				ASE-76B-9C1		1233				7			X	X	X	X	X	X			
9																					
10																					
11																					
12																					

AL 1730 9/16/09

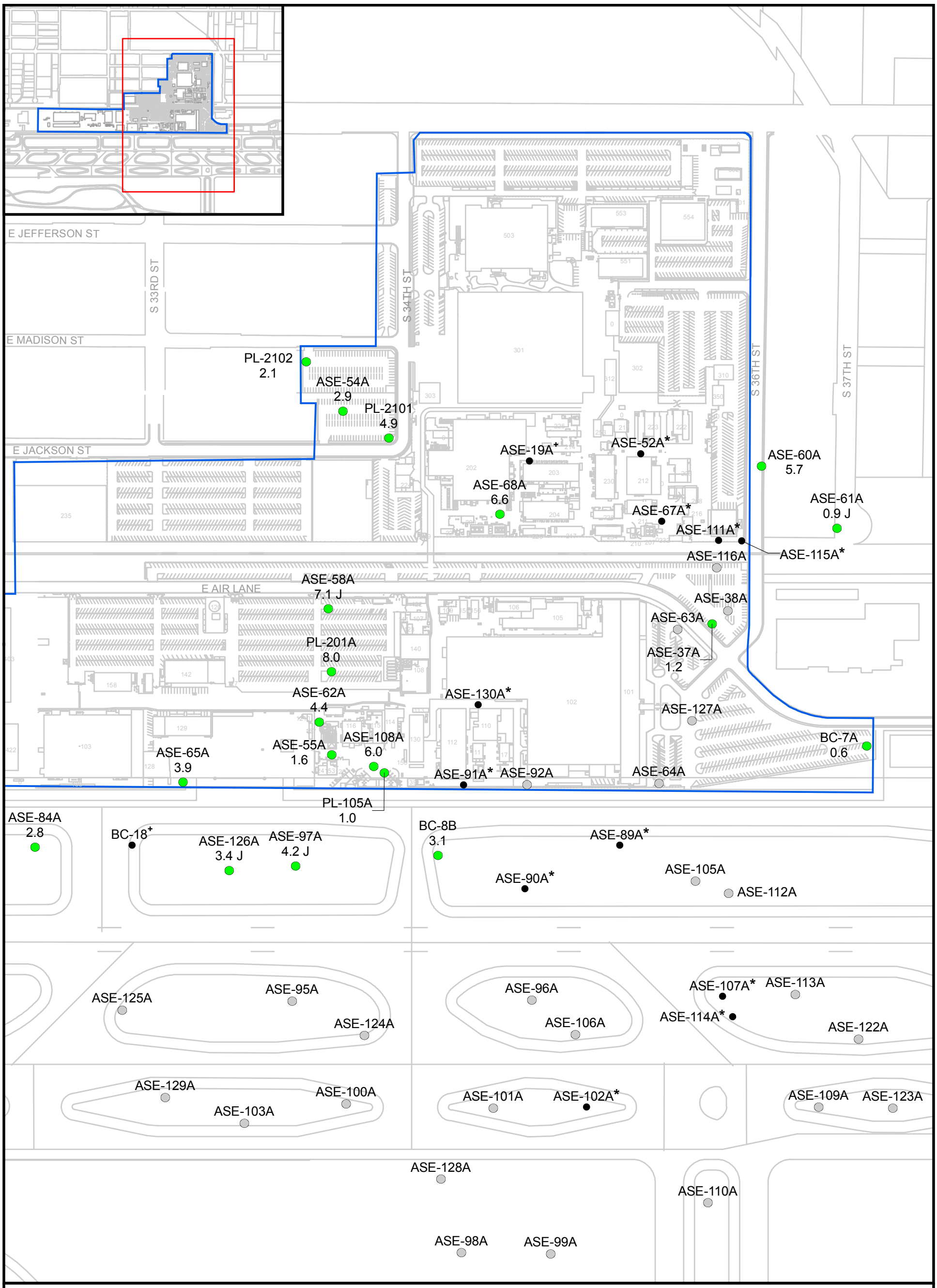
Relinquished by	Company	HHA	Received by	Company	FedEx	Condition		Custody Seals Intact	
	Date/Time	09/15/09 15:30		Date/Time	09/15/09 15:30	Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time		VuBaul	Date/Time	9/16/09 9:30	Cooler Temp.	4.5		

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

#002

Appendix F
Total TCE and Total TCA Figures, September 2009 Groundwater Parameters



Legend

- Compound Detected (µg/L)
- Compound Not Detected
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility

N W E S

0 150 300 600 Feet

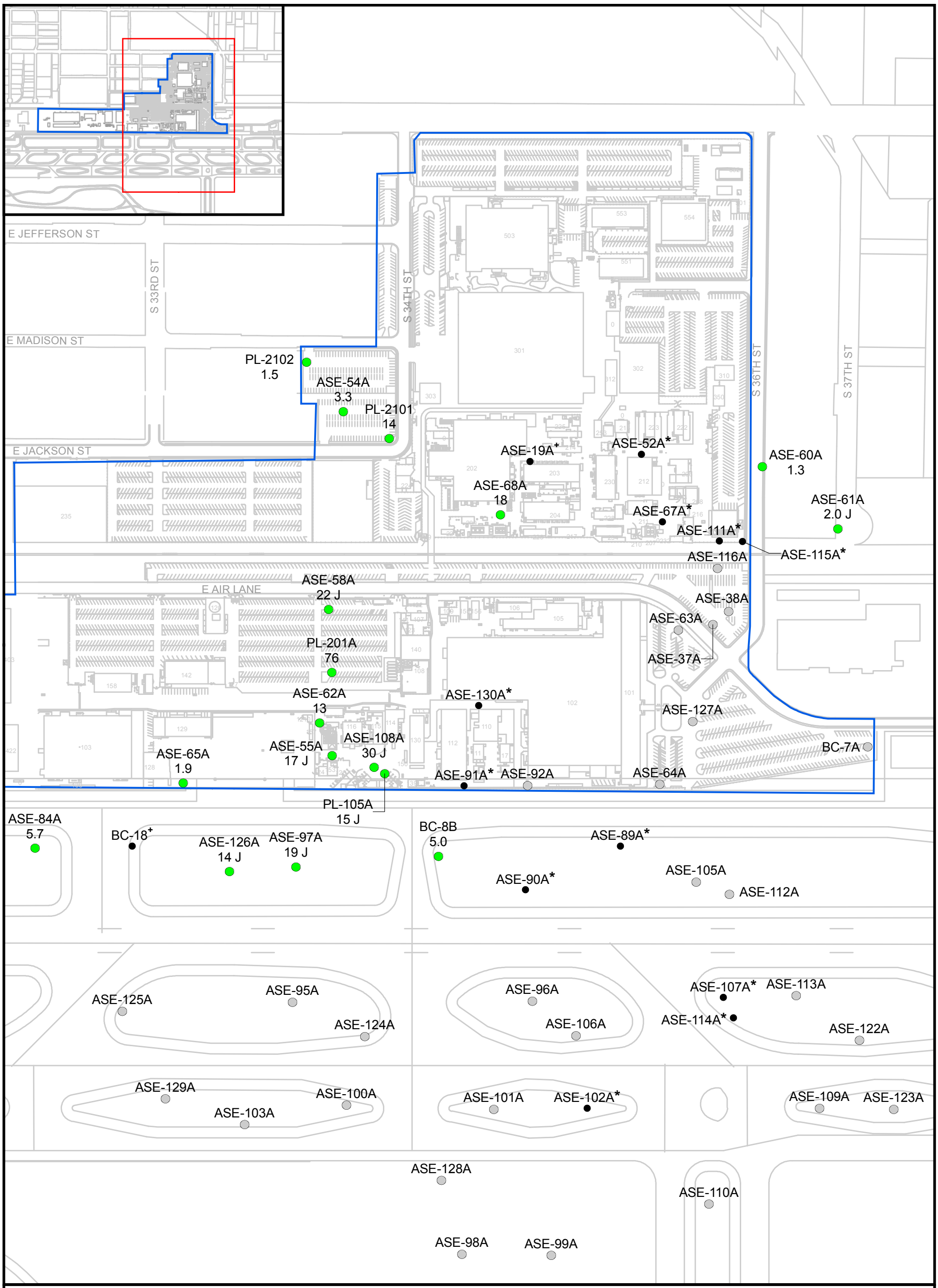
Notes:
1. µg/L = micrograms per liter
2. Value posted is the sum of trichloroethene, cis-1,2-dichloroethene, and vinyl chloride.
3. Samples collected between September 8, 2009 and September 18, 2009.
4. J = Analyte detected, but concentration estimated by laboratory.
5. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
6. + Indicates monitoring well not sampled due to insufficient water in well.

FIGURE F-1
TOTAL TRICHLOROETHENE
SEPTEMBER 2009
GROUNDWATER PARAMETERS

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIGF-1_GW_TOTAL_TCE.MXD TWONG2 11/24/2009 11:02:29



Legend

- Compound Detected (µg/L)
- Compound Not Detected
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility

N W E S

0 150 300 600 Feet

Notes:
1. µg/L = micrograms per liter
2. Value posted is the sum of 1,1,1-trichloroethene, 1,1-dichloroethane, 1,1-dichloroethene, and chloroethane.
3. Samples collected between September 8, 2009 and September 18, 2009.
4. J = Analyte detected, but concentration estimated by laboratory.
5. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
6. + Indicates monitoring well not sampled due to insufficient water in well.

FIGURE F-2
TOTAL TRICHLOROETHANE
SEPTEMBER 2009
GROUNDWATER PARAMETERS

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

\\MADISON\GROUPS\EMS\GIS_LIBRARY\HONEYWELL\34TH_STREET_FACILITY\REPORTS\UST\MAPFILES\2009_3RDQTR_SEP\FIGF-2_GW_TOTAL_TCA.MXD TWONG2 11/24/2009 11:02:03